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FILE COVERS 1907 - 10 Oct 2006 VOL 145 ISS 16 FILE LAST UPDATED: 8 Oct 2006 (20061008/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

L1 2 SEA FILE=REGISTRY ABB=ON PLU=ON ALUM/CN L2 5865 SEA FILE=HCAPLUS ABB=ON PLU=ON (POLYCATION? OR POLY CATION?)(S)(POLYMER## OR PEPTIDE OR POLYPEPTIDE OR PROTEIN OR POLYPROTEIN) OR ODN OR (IMMUNOSTIMUL? OR IMMUN? STIMUL?) (3A) (DEOXYNUCLEOTIDE OR DEOXY NUCLEOTIDE) OR (KLK OR LYS LEU LYS) (5A) MOTIF OR (NEUROACTIV? OR NEURO ACTIV?) (3 A) (COMPOUND OR COMP##)

L3 54120 SEA FILE=HCAPLUS ABB=ON PLU=ON L1 OR ALUM OR FREUND? OR (COMPLET? OR INCOMPLET?) (3A) ADJUVANT

2104 SEA FILE=HCAPLUS ABB=ON PLU=ON (SP2216 OR (SP OR L4

PNEUMON?) (3A) 2216 OR (STREPTOCOCC? OR DIPLOCOCC? OR D OR

S) (W) PNEUMONIAE OR PNEUMOCOCC?) AND ANTIGEN##

L5 585 SEA FILE=HCAPLUS ABB=ON PLU=ON L4 AND (SERUM OR SERA)

L6 14 SEA FILE=HCAPLUS ABB=ON PLU=ON (L2 OR L3) AND L5

L6 ANSWER 1 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 08 Sep 2005

ACCESSION NUMBER: 2005:978802 HCAPLUS Full-text

DOCUMENT NUMBER: 145:5890

TITLE: Mucosal Immunity Induced by Pneumococcal

Glycoconjugate

AUTHOR(S): Lee, Chi-Jen; Lee, Lucia; Gu, Xin-Xing

CORPORATE SOURCE: Center for Biologics Evaluation and Research, Food

and Drug Administration, Rockville, MD, USA Critical Reviews in Microbiology (2005), 31(3),

137-144

CODEN: CRVMAC; ISSN: 1040-841X

PUBLISHER: Taylor & Francis, Inc. DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

SOURCE:

A review. Host defenses against Streptococcus pneumoniae involve opsonophagocytosis mediated by antibodies and complement. Because the pneumococcus is a respiratory pathogen, mucosal immunity may play an important role in the defense against infection. The mechanism for protection in mucosal immunity consists of induction of immunity by the activation of lymphocytes within the mucosal-associated lymphoid tissues, transport of antigen-specific B and T cells from inductive sites through bloodstream and distribute to distant mucosal effector sites. Secretory IgA is primarily involved in protection of mucosal surfaces. Mucosal immunization is an effective way of inducing immune responses at mucosal surfaces. Several mucosal vaccines are in various stages of development. A number of mucosal adjuvants have been proposed. CpG oligodeoxynucleotide (ODN) has been shown to be an effective mucosal adjuvant for various antigens. Mucosal immunity induced by intranasal immunization was studied with a pneumococcal or. glycoconjugate, using CpG ODN as adjuvant. Mice immunized with type 9V polysaccharide (PS) conjugated to inactivated pneumolysin (Ply) plus CpG produced high levels of 9V PS IgG and IgA antibodies compared to the group that received the conjugate alone. High levels of subclasses of IgG1, IgG2 and IgG3 antibodies were also observed in sera of mice immunized with 9V PS-Ply plus CpG. In addition, high IgG and IgA antibody responses were observed in sera of young mice immunized with 9V PS-Ply plus CpG or the conjugate plus non-CpG compared with the group received the conjugate alone. These results reveal that mucosal immunization with pneumococcal glycoconjugate using CpG as adjuvant can confer protective immunity against pneumococcal infection.

REFERENCE COUNT:

THERE ARE 65 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 2 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN

Entered STN: 04 Mar 2005

2005:186801 HCAPLUS Full-text ACCESSION NUMBER:

TITLE:

Experimental PADRE-carbohydrate vaccines composed

of the universal helper T-lymphocyte epitope

(PADRE) and Streptococcus

pneumoniae capsular polysaccharides

AUTHOR(S): Alexander, Jeff; del Guercio, Marie-France;

Stewart, Barbara; Maewal, Ajesh; Beebe, Melanie;

Nahm, Moon H.; Newman, Mark J.

CORPORATE SOURCE:

SOURCE:

Epimmune Inc, San Diego, CA, 92121, USA

Abstracts of Papers, 229th ACS National Meeting, San Diego, CA, United States, March 13-17, 2005 (2005), CARB-089. American Chemical Society:

Washington, D. C. CODEN: 69GQMP

DOCUMENT TYPE: Conference; Meeting Abstract

LANGUAGE: English

The 13 amino acid Pan HLA DR Epitope (PADRE) is proposed as a simple carrier AΒ epitope to induce T cell help in synthetic bacterial, viral and anti-tumor vaccines. PADRE peptide binds with high or intermediate affinity to 15 of 16 of the most common HLA-DR types tested and should overcome the problems posed by the extreme polymorphism of HLA-DR mols. in the human population. Simple carbodiimide-mediated condensation chemical was used to conjugate PADRE synthetic peptide to capsular polysaccharides from serotypes 14, 6B and 9V. High titer antibody responses specific for polysaccharides of S. pneumoniae were induced using Complete Freund's Adjuvant (CFA) and alhydrogel Al(OH)3 formulations. The carrier effect of the PADRE synthetic peptide was only evident using the PADRE-polysaccharide conjugates; simple mixts. of the PADRE peptide and polysaccharides were non-immunogenic. The potential protective value of the polysaccharide-specific antibodies was measured as a function of opsonophagocytic activity for the 6B serotype. High titers of opsonophagocytic activity were measured in sera from mice immunized with the PADRE-polysaccharide conjugates. These data, in addition to several studies using PADRE linked to self antigens, suggest that PADRE is a viable alternative to more complex carriers for use in vaccine development.

ANSWER 3 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN L6

ED Entered STN: 29 Oct 2004

ACCESSION NUMBER: 2004:905779 HCAPLUS

DOCUMENT NUMBER: 141:378840

TITLE:

Streptococcus pneumoniae

antigens, polynucleotides and antibodies

for antagonist screening and for diagnosis and

Full-text

therapy of bacterial infection

INVENTOR(S): Meinke, Andreas; Nagy, Eszter; Hanner, Markus;

Dewasthaly, Shailesh; Stierschneider, Ulrike

PATENT ASSIGNEE(S):

Intercell A.-G., Austria SOURCE: PCT Int. Appl., 191 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PA' | PATENT NO. | | | | | KIND DATE | | | APPLICATION NO. | | | | | | DATE | | | |
|-----|-----------------------------------|-----|-----|-----|-----|-----------|--------------|-----|-----------------|----------------|-----|-----|-----|-----|------|----------|--|--|
| | WO 2004092209 A2 WO 2004092209 A3 | | | | | | 2004 2004 | | , | WO 2004-EP3984 | | | | | | 20040415 | | |
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| | | | | | | | CZ, | | | | | | | | | | | |
| | | | | | | | HR, | | | | | | | | | | | |
| | | | | | | | LS, | | | | | | | | | | | |
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| | | SE, | SG, | SK, | SL, | SY, | ТJ, | TM, | TN, | TR, | TT, | TZ, | UA, | ŪG, | US, | UZ, | | |
| | | | | | ZA, | | | | | | | | | | | · | | |
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                                            EP 2004-727537
                                                                    20040415
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     CN 1774447
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                                            CN 2004-80010200
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PRIORITY APPLN. INFO.:
                                            EP 2003-450087
                                                                    20030415
                                            WO 2004-EP3984
                                                                    20040415
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AΒ The present invention discloses isolated nucleic acid mols. encoding a hyperimmune serum reactive antigen or a fragment thereof as well as hyperimmune serum reactive antigens or fragments thereof from S. pneumoniae, methods for isolating such antigens and specific uses thereof. The invention also provides monoclonal antibodies, Fab fragments, chimeric antibodies and humanized antibodies specific to the Streptococcus pneumoniae antigens. In addition, the invention disclosed methods for antagonist screening; bacterial infection diagnosis and therapy; selection of anticalines, aptamers and spiegelmers; and manufacture of functional RNA, ribozymes, antisense nucleic acids and siRNA.

L6 ANSWER 4 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN

Entered STN: 23 Apr 2004

2004:333891 HCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 140:351652

TITLE: Anal. chip comprising evanescent field measurement

platform and microarray for detection of 16S-rRNA

from clin. relevant bacteria in liquid samples INVENTOR(S):

Schrenzel, Jacques; Francois, Patrice;

Charbonnier, Yvan; Jacquet, Jean Gabriel; Utinger,

Dominic; Kresbach, Gerhard M.; Abel, Andreas;

Ehrat, Markus

PATENT ASSIGNEE(S): Hopitaux Universitaires De Geneve, Switz.

SOURCE: PCT Int. Appl., 82 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PA | PENT | NO. | | | KIN | D | DATE | | | | ICAT | | | | | ATE |
|---------------|------|------|-----|-------------|------------|-----|-----------------|------|-----|------|------|------|----------|-----|-----|---------|
| WO 2004033720 | | | | A2 20040422 | | 1 | WO 2003-EP10626 | | | | | | 20030924 | | | |
| WO | 2004 | 0337 | 20 | | A3 | | 2004 | 0513 | | | | | | | | |
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| | | NO, | NZ, | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SK, | SL, | ТJ, | TM, | TR, | TT, |
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| | | | | TD, | | | | | · | · | • | · | | • | • | • |
| AU | 2003 | 2716 | 37 | | A 1 | | 2004 | 0504 | | AU 2 | 003- | 2716 | 37 | | 2 | 0030924 |

EP 1556507 A2 20050727 EP 2003-753450 20030924 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK PRIORITY APPLN. INFO.: EP 2002-22631 A 20021009

> WO 2003-EP10626 20030924

AΒ The invention is related to an anal. chip for the simultaneous determination of one or more different bacteria in a liquid sample comprising - an evanescent field measurement platform, e.g. an optical waveguide, as a solid carrier and a plurality of immobilized specific recognition elements forming an array for the detection of bacterial 16S-rRNA without amplification of the polynucleotide sequences contained in the sample. The invention is also related to an anal. method based on the use of said anal. chip to detect clin. relevant bacteria in biol. samples. Methods for immobilization of recognition elements (such as polynucleotides, peptides, antigens, etc.) on the chip are disclosed. The compns. of the layers of the optical waveguide are also disclosed.

ANSWER 5 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN

Entered STN: 02 Aug 2002

ACCESSION NUMBER: 2002:575103 HCAPLUS Full-text

DOCUMENT NUMBER: 137:168250

TITLE: Hyperimmune serum-reactive

> antigens derived from expression libraries for treating or preventing pathogen infection,

cancer, allergy, and autoimmune disease

INVENTOR(S): Meinke, Andreas; Nagy, Eszter; Von Ahsen, Uwe;

Klade, Christoph; Henics, Tamas; Zauner, Wolfgang; Minh, Duc Bui; Vytvytska, Oresta; Etz, Hildegard; Dryla, Agnieszka; Weichhart, Thomas; Hafner,

Martin; Tempelmaier, Brigitte

PATENT ASSIGNEE(S):

Cistem Biotechnologies Gmbh, Austria; Intercell AG

SOURCE: PCT Int. Appl., 252 pp.

CODEN: PIXXD2

Patent

DOCUMENT TYPE:

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

| PA | CENT | NO. | | | KIN | D | DATE | | | APPL | ICAT | ION 1 | NO. | | D. | ATE . | |
|----|------------|------|-----|-----|------------|----------|--------------------------|------|---------------|-------|------|---------|-----|-----|----------|---------|--|
| WO | 2002 | 0591 | 48 | | A 2 | 20020801 | | | WO 2002-EP546 | | | | | | 20020121 | | |
| WO | 2002 | 0591 | 48 | | C2 | | 2002 | 1031 | | | | | | | | | |
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| | | GΕ, | GH, | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | ΚE, | KG, | KP, | KR, | KZ, | |
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| ΑT | 2001 | 0013 | 0 | | A 5 | | 2002 | 1215 | | AT 2 | 001- | 130 | | | 2 | 0010126 | |
| ΑT | 4107 | 98 | | | В | | 2003 | 0725 | | | | | | | | | |
| CA | CA 2436057 | | | | AA | | 20020801 CA 2002-2436057 | | | | 2 | 0020121 | | | | | |
| ΕP | 1355 | 930 | | | A2 | | 2003 | 1029 | | EP 20 | 002- | 7166 | 69 | | 2 | 0020121 | |
| EP | 1355 | 930 | | | B1 | | 2005 | 1109 | | | | | | | | | |

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PRIORITY APPLN. INFO.:
                                             AT 2001-130
                                                                    20010126
                                             EP 2002-716669
                                                                     20020121
                                             WO 2002-EP546
                                                                     20020121
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AΒ Described is a method for identification, isolation and production of hyperimmune serum-reactive antigens from a specific pathogen, a tumor, an allergen or a tissue or host prone to autoimmunity that are suited for use as vaccines for treating related diseases in animals or humans. The method is characterized by providing an antibody preparation from a plasma pool of said given type of animal or from a human plasma pool or individual sera with antibodies against said specific pathogen, tumor, allergen or tissue or host prone to auto-immunity; providing at least one expression library of said specific pathogen, tumor, allergen or tissue or host prone to auto-immunity; screening said at least one expression library with said antibody preparation; identifying antigens which bind in said screening to antibodies in said The antibody preparation; screening the identified antigens with individual antibody prepns. from individual sera from individuals with antibodies against said specific pathogen, tumor, allergen or tissue or host prone to autoimmunity; identifying the hyperimmune serum-reactive antigen portion of said identified antigens and which hyperimmune serum-reactive antigens bind to a relevant portion of said individual antibody prepns. from said individual sera; and optionally isolating said hyperimmune serum-reactive antigens and producing said hyperimmune serum-reactive antigens by chemical or recombinant methods.

L6 ANSWER 6 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 05 Mar 2000

AUTHOR(S):

ACCESSION NUMBER: 2000:146815 HCAPLUS Full-text

DOCUMENT NUMBER: 132:292419

TITLE: CpG oligodeoxynucleotides act as adjuvants for

pneumococcal polysaccharide-protein

conjugate vaccines and enhance antipolysaccharide immunoglobulin G2a (IgG2a) and IgG3 antibodies Chu, Rose S.; McCool, Tera; Greenspan, Neil S.;

Schreiber, John R.; Harding, Clifford V.

CORPORATE SOURCE: Institute of Pathology, Case Western Reserve

University, Cleveland, OH, 44106, USA

SOURCE: Infection and Immunity (2000), 68(3), 1450-1456

CODEN: INFIBR; ISSN: 0019-9567 American Society for Microbiology

PUBLISHER: DOCUMENT TYPE:

Journal

LANGUAGE:

English

Pneumococcal polysaccharide-protein conjugate vaccines elicit antipolysaccharide antibodies, but multiple doses are required to achieve protective antibody levels in children. In addition, the immunogenicity of exptl. multivalent pneumococcal conjugate vaccines varies with different polysaccharide serotypes. One strategy to improve these vaccines is to incorporate an adjuvant to enhance their immunogenicity. Synthetic oligodeoxynucleotides containing unmethylated CpG motifs (CpG ODN) are adjuvants that promote T-cell and T-dependent antibody responses to protein antigens , but it has been unclear whether CpG ODN can enhance polysaccharidespecific antibody responses. The present studies demonstrate significant adjuvant activity of CpG ODN for antibody responses against Streptococcus pneumoniae polysaccharide types 19F and 6B induced by conjugates of 19F and 6B with the protein carrier CRM197. BALB/c ByJ mice were injected with 19F-CRM197 or 6B-CRM197 with or without CpG ODN, and sera were tested for anti-19F or anti-6B antibodies by ELISA. The polysaccharide-specific antibody response to 19F-CRM197 alone was predominantly of the IgG1 and IgM isotypes, but addition of CpG ODN markedly increased geometric mean titers of total anti-19F antibody (23-fold), anti-19F IgG2a (26-fold), and anti-19F IgG3 (>246-fold). The polysaccharide-specific antibody response to 6B-CRM197 alone consisted only of IgM, but addition of CpG ODN induced high titers of anti-6B IgG1 (>78fold increase), anti-6B IgG2a (>54-fold increase), and anti-6B IgG3 (>3,162fold increase). CpG ODN also increased anti-CRM197 IgG2a and IgG3. Adjuvant effects were not observed with control non-CpG ODN. Thus, CpG ODN significantly enhance anti-polysaccharide IgG responses (especially IgG2a and . IgG3) induced by these glycoconjugate vaccines.

REFERENCE COUNT:

THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 7 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN

Entered STN: 03 Mar 2000

ACCESSION NUMBER:

2000:144761 HCAPLUS Full-text

DOCUMENT NUMBER:

132:193251

TITLE:

Immunogenic β -propionamido-linked

polysaccharide protein conjugate useful as a vaccine produced using an N-acryloylated

polysaccharide

INVENTOR(S):

Michon, Francis; Huang, Chun-Hsien; Uitz,

Catherine

PATENT ASSIGNEE(S):

North American Vaccine, Inc., USA

PCT Int. Appl., 43 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| IL, IN, | IS, JP, KE, | KG, KP, KR, | KZ, LC, LK, LR, | LS, LT, LU, |
| LV, MD, | MG, MK, MN, | MW, MX, NO, | NZ, PL, PT, RO, | RU, SD, SE, |
| SG, SI, | SK, SL, TJ, | TM, TR, TT, | UA, UG, UZ, VN, | YU, ZA, ZW, |

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                                                                    19990818
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                                                                    19990818
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Novel immunogenic β -propionamido-linked polysaccharide- and N-propionamido-linked oligosaccharide-protein conjugates are provided as well as method of producing the conjugates. The conjugation procedure is simple, rapid, reproducible and applicable to a variety of polysaccharides or oligosaccharides derived from bacterial species, yeast, cancer cells or chemical synthesized. Vaccines and methods of immunization against infection or cancer using the immunogenic β -propionamido-linked polysaccharide- and β -propionamido- linked oligosaccharide-protein conjugates are also disclosed.

L6 ANSWER 8 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 09 Mar 1985

ACCESSION NUMBER: 1985:74956 HCAPLUS Full-text

DOCUMENT NUMBER:

102:74956

TITLE:

Antibody to epiglycanin and radioimmunoassay to detect epiglycanin-related glycoproteins in body

fluids of cancer patients

AUTHOR(S):

Codington, John F.; Bhavanandan, V. P.; Bloch, Kurt J.; Nikrui, Najmosama; Ellard, James V.;

Wang, Philip S.; Jeanloz, Roger W.

CORPORATE SOURCE:

Dep. Biol. Chem., Harvard Med. Sch., Boston, MA,

02114, USA

SOURCE:

JNCI, Journal of the National Cancer Institute

(1984), 73(5), 1029-38

CODEN: JJIND8; ISSN: 0198-0157

DOCUMENT TYPE:

Journal

LANGUAGE:

English

By means of a radioimmunoassay that used 125I-labeled epiglycanin and antiepiglycanin antiserum induced in rabbits by injections of viable TA3-Ha ascites cells with Freund's complete adjuvant, picogram quantities of epiglycanin could be detected. Antiepiglycanin antiserum was similarly produced in allogeneic mice. Unlabeled epiglycanin lost the capacity to compete with 125I-labeled epiglycanin in the radioimmunoassay as a result of periodate oxidation or incubation with endo- α -N-acetyl-D- galactosaminidase (Diplococcus pneumoniae), an enzyme found to cleave only the disaccharide β -D-galactopyranosyl- (1 \rightarrow 3)-2-acetamido-2-deoxy-D-galactose chain from serine or threonine residues in epiglycanin. Glycosylhydrolases known to cleave α -D-mannose, β -D-galactose (1,4-linked), β -N-acetyl-D-glucosamine, and α -N-acetyl-

D-galactosamine did not reduce the activity of epiglycanin. Neuraminidase enhanced the activity 2-5-fold. The finding that little or no activity was demonstrated by the disaccharide, the reduced disaccharide, or other glycoproteins containing the same disaccharide chain suggested that the antigenic determinant probably involved the disaccharide and a unique amino acid sequence at the site of its attachment. By means of the radioimmunoassay, epiglycanin cross-reactive antigens were detected in the peritoneal or pleural fluid and in the sera of patients with metastatic cancer. Lower concns. of epiglycanin-like antigen(s) were found in the peritoneal fluid of patients with hepatitis or liver cirrhosis but not in normal serum.

L6 ANSWER 9 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 12 May 1984

ACCESSION NUMBER: 1981:585388 HCAPLUS Full-text

DOCUMENT NUMBER: 95:185388

TITLE: Effects of prostaglandin synthesis inhibition on

the immune response

AUTHOR(S): Schleimer, Robert P.; Benjamini, Eliezer

CORPORATE SOURCE: Sch. Med., Johns Hopkins Univ., Baltimore, MD,

21239, USA

SOURCE: Immunopharmacology (1981), 3(3), 205-19

CODEN: IMMUDP; ISSN: 0162-3109

DOCUMENT TYPE: Journal LANGUAGE: English

Inhibition of prostaglandin synthesis at the time of antigen presentation was used to test the role of prostaglandins in the inductive stage of the in vivo immune response to several antigens. Indomethacin and Ro 20-5720, 2 prostaglandin synthesis inhibitors, produced a several-fold enhancement of the primary IgM and IgG anti-sheep red blood cell plaque-forming cell (PFC) response in CAF1 mice. Indomethacin and Ro 20-5720 also enhanced the antibody response to chicken serum albumin (CSA) in buffered saline. However, the antibody response to CSA in Freund's adjuvant was reduced by indomethacin treatment. Indomethacin treatment enhanced the PFC response to a chicken lysozyme-lipopolysaccharide conjugate, and did not greatly affect the PFC response to pneumococcal polysaccharide. The allogeneic cytotoxic response to the El-4 tumor line was delayed by indomethacin treatment and, since this tumor does not synthesize prostaglandins, it appears that prostaglandin synthesis by the host is important in the generation of a cytotoxic response to this tumor. Thus, the role of prostaglandins in the induction of the immune response varies, and can be proinductive or anti-inductive, depending on the eliciting antigen.

L6 ANSWER 10 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 12 May 1984

ACCESSION NUMBER: 1974:402208 HCAPLUS Full-text

DOCUMENT NUMBER: 81:2208

TITLE: Effect of transplanted methylcholanthrene induced

fibrosarcomata and Corynebacterium parvum on the immune response of CBA and A/HeJ mice to thymus

dependent and independent antigens

AUTHOR(S): James, K.; Ghaffar, A.; Milne, I.

CORPORATE SOURCE: Med. Sch., Univ. Edinburgh, Edinburgh, UK

SOURCE: British Journal of Cancer (1974), 29(1), 11-20

CODEN: BJCAAI; ISSN: 0007-0920

DOCUMENT TYPE: Journal

LANGUAGE: English

The effect of transplanted syngeneic methylcholanthrene induced fibrosarcomata AΒ on the primary immune response of CBA and A/HeJ mice to standard doses of alum bovine serum albumin(BSA), sheep erythrooytes(SRBC), and type III pneumococcus polysaccharide antigen (SIII) was investigated. In animals with established fibrosarcomata, the responses were (with 1 exception) either normal or elevated. Cell transfer studies in sublethally irradiated syngeneic recipients confirmed that the spleens from tumor-bearing mice were capable of responding effectively to all 3 antigens. In animals simultaneously challenged with viable sarcoma cells and antigen the response to alum BSA was suppressed while those to SRBC and SIII were ofter enhanced. Furthermore the secondary response of A/HeJ mice to BSA was also suppressed by the simultaneous injection of viable fibrosarcoma cells. The administration of C. parvum 3 days after antigen had a variable effect. Nevertheless in a number of cases it increased the primary response to all 3 antigens and also inhibited the growth of the CBA fibrosarcoma but was without effect on the A/HeJ fibrosarcoma.

ANSWER 11 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN 1.6

Entered STN: 22 Apr 2001

1966:78538 HCAPLUS ACCESSION NUMBER: Full-text

DOCUMENT NUMBER: 64:78538 ORIGINAL REFERENCE NO.: 64:14763d-g

TITLE: Nucleic acids as antigens

AUTHOR(S): Plescia, O. J.; Braun, W.; Palczuk, N. C.

CORPORATE SOURCE: Rutgers Univ., New Brunswick, NJ

SOURCE: Molecular and Cellular Basis of Antibody Formation, Proceedings of a Symposium (1965),

> 1964, 61-70 CODEN: 15AGA6

DOCUMENT TYPE: LANGUAGE:

Journal English

Antigen properties of DNA and RNA from calf thymus were investigated by specific antibody production in rabbits and further analyses of the complex by the C'-fixation reaction. DNA alone was not antigenic until after heating and the formation of a suitable complex. Best results in antibody production were found if a complex was made by mixing equal amounts of DNA solution (boiled previously at 100° for 10 min.) and a 1% methylated bovine serum albumin (I) with one volume of complete Freund adjuvant. Immunization was performed for 3 weeks (one injection per week containing 0.25 nanogram DNA/ml. and 1.05 nanogram DNA/dose. The results were typical for an immune response to a protein-hapten complex (antibodies formed against the protein, the hapten, and the complex). The C'-fixation reaction between rabbit anti-calf-thymus DNA and heat-denaturated calf thymus at equivalence was inhibited by each of the above types of deoxyribonucleotide. The antiserum prepared as mentioned above reacted with heat-denaturated DNA from various species including Bacillus subtilis, Brucella abortus, B. suis, Salmonella enteritidis, Diplococcus pneumoniae , but in different degrees. Fractionation of DNA preparation by ultracentrifugation in CsCl density gradient did not reveal any difference between the purified and native DNA preparation The sucessful immunization with DNA preparation was presumed to be the result of the formation of a complex between the acidic DNA and the basic I. Similar successful immunization was proved for a complex produced from I and Type III polysaccharides of D. pneumoniae.

L6 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 22 Apr 2001

ACCESSION NUMBER: 1956:24990 HCAPLUS Full-text

DOCUMENT NUMBER: 50:24990 ORIGINAL REFERENCE NO.: 50:5134a-d

TITLE:

Investigation on rabbit antibodies by the use of

partition chromatography

AUTHOR(S): Humphrey, J. H.; Porter, R. R. CORPORATE SOURCE: Natl. Inst. Med. Research, London SOURCE: Biochemical Journal (1956), 62, 93-9

CODEN: BIJOAK; ISSN: 0264-6021

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

cf. C.A. 49, 7626a. The technique of partition chromatography has been used to study the antibodies in γ -globulin taken from rabbits at different stages of immunization with various antigens. When formalin-killed pneumococci type III, alum-precipitated ovalbumin, or influenza virus were given intravenously, precipitating or hemagglutin-inhibiting antibodies were found exclusively in the more slowly running fraction during the earlier stages of immunization, but predominantly in the middle fractions at later stages. By simultaneous intravenous immunization of animals against 2 antigens, it was shown that independent patterns of response occurred for each antibody. The position of the antibody in the fractions is a function of the immunological history of the animal and not of the antibody level in the serum. In γ-globulin from rabbits immunized by intramuscular injection with an adjuvant mixture, the antibody occurred in the more slowly running fractions throughout. The combining ratio of antigen with antibody was somewhat greater in the faster than in the more slowly running fractions. In the case of antigen ovalbumin antibodies, the extent of cross-reaction with duck ovalbumin was similar in all fractions. The findings suggest that different cells, capable of producing slightly different globulins, may predominate in antibody production according to the route of injection and duration of antigenic stimulus.

L6 ANSWER 13 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 22 Apr 2001

ACCESSION NUMBER: 1947:31423 HCAPLUS

DOCUMENT NUMBER: 41:31423 ORIGINAL REFERENCE NO.: 41:6329c-e

TITLE: Antiproteins in horse serums. IV.

Antibodies to rabbit serum globulin and

their interaction with antigen

AUTHOR(S): Treffers, Henry P.; Heidelberger, Michael; Freund,

Jules

CORPORATE SOURCE: Columbia Univ.

SOURCE: Journal of Experimental Medicine (1947), 86,

CODEN: JEMEAV; ISSN: 0022-1007

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

The intravenous injection of 2 horses with alum-precipitated rabbit serum globulin in the production of antibody gave a typical precipitin reaction without a prezone in the region of antibody excess. The chemical, phys., and serological properties of this antibody are comparable to those of the more familiar anticarbohydrate antibodies. The subcutaneous injection of horses with the globulin antigen gave rise to low grade "univalent" antibody which did not precipitate with soluble antigen. The low-grade antibody could be removed from solution by attachment to preformed specific ppts. or by copptn. in the presence of "multivalent" precipitating antibody. It is concluded that the familiar antitoxin type of antibody is not the only form of antiprotein response in horses but that precipitating and low-grade nonpptg. antibodies may also be formed. The nature of the antigen and the route of injection are demonstrated to be important factors in determining the characteristics of the antibody formed.

ANSWER 14 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN L6

ED Entered STN: 22 Apr 2001

ACCESSION NUMBER: 1947:31422 HCAPLUS Full-text

DOCUMENT NUMBER: 41:31422 ORIGINAL REFERENCE NO.: 41:6329b-c

TITLE:

Antiproteins in horse serums. III.

Antibodies to rabbit serum albumin and

their reaction with antigen

AUTHOR(S): Treffers, Henry P.; Heidelberger, Michael; Freund,

Jules

CORPORATE SOURCE:

Columbia Univ.

SOURCE:

Journal of Experimental Medicine (1947), 86, 83-94

CODEN: JEMEAV; ISSN: 0022-1007

DOCUMENT TYPE:

Journal

LANGUAGE:

Unavailable

The antibody resulting from subcutaneous injection of alum -precipitated rabbit serum albumin resembled diphtheria antitoxin and anti-egg albumin in the horse in giving a sharp zone of flocculation with antigen, in being H2O soluble, in reactivity toward an anti-antibody rabbit serum, and in its electrophoretic properties. The effect of continued immunization and of variation in volume and temperature on the reactivity of the antibody are discussed. Intravenous injection of the same antigen into horses did not give rise to detectable quantities of antibody of the same type.

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FILE 'JAPIO' ENTERED AT 14:50:37 ON 10 OCT 2006 COPYRIGHT (C) 2006 Japanese Patent Office (JPO) - JAPIO

L7 39 S L6

L8 28 DUP REM L7 (11 DUPLICATES REMOVED)

L8 ANSWER 1 OF 28 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights reserved on STN

2006070280 EMBASE ACCESSION NUMBER: Full-text

TITLE:

CCL5 modulates pneumococcal immunity and

carriage.

AUTHOR:

Palaniappan R.; Singh S.; Singh U.P.; Singh R.; Ades E.W.; Briles D.E.; Hollingshead S.K.; Royal III W.;

Sampson J.S.; Stiles J.K.; Taub D.D.; Lillard Jr. J.W.

CORPORATE SOURCE: Dr. J.W. Lillard Jr., Department of Microbiology,

Biochemistry, and Immunology, Morehouse School of Medicine, 720 Westview Drive, Atlanta, GA 30310-1495,

United States. lillard@msm.edu

Journal of Immunology, (15 Feb 2006) Vol. 176, No. 4, SOURCE:

pp. 2346-2356. .

Refs: 63

ISSN: 0022-1767 CODEN: JOIMA3

COUNTRY: DOCUMENT TYPE: FILE SEGMENT:

United States Journal; Article 004 Microbiology

> 026 Immunology, Serology and Transplantation

LANGUAGE: SUMMARY LANGUAGE:

English English

ENTRY DATE:

Entered STN: 10 Mar 2006

Last Updated on STN: 10 Mar 2006

AB Understanding the requirements for protection against pneumococcal carriage and pneumonia will greatly benefit efforts in controlling these diseases. Recently, it has been shown that genetic polymorphisms can result in diminished expression of CCL5, which results in increased susceptibility to and progression of infectious diseases. We show that CCL5, together with Th cytokine mRNA expression, is temporally up-regulated during pneumococcal carriage. To determine the contribution of CCL5 to pneumococcal surface antigen A-specific humoral and cellular pneumococcal immunity, mice were treated with anti-CCL5 or control Abs before and during Streptococcus pneumoniae strain EF3030-challenge for the initiation of carriage. CCL5 blockade resulted in a decrease of CD4 (+) and CD8(+) T cells as well as CD11b(+) cells in the spleen, cervical lymph node, lung, and nasopharyngeal associated lymphoid tissue during the recognition phase of the pneumococcal adaptive immune response. CCL5 blockade significantly reduced the Ag-specific IgG2a and IgG1 Abs in serum and IgA Ab levels in nasal washes. These decreases also corresponded to reductions in Ag-specific T cell (mucosal and systemic) responses. CCL5 inhibition resulted in decreasing the quantity of IL-4- and IFN- γ - secreting CD4(+) T cells and increasing the number of Ag-specific *IL-10-producing CD4(+) T cells; these changes combined also corresponded with the transition from pneumococcal carriage to lethal pneumonia. These data suggest that CCL5 is an essential factor for the induction and maintenance of protective pneumococcal immunity. Copyright .COPYRGT. 2006 by The American Association of Immunologists, Inc.

L8 ANSWER 2 OF 28 MEDLINE on STN DUPLICATE 1

ACCESSION NUMBER: 2005499092 MEDLINE

DOCUMENT NUMBER: PubMed ID: 16170904

TITLE:

Mucosal immunity induced by pneumococcal

glycoconjugate.

Lee Chi-Jen; Lee Lucia H; Gu Xin-Xing AUTHOR:

CORPORATE SOURCE: Center for Biologics and Research, Food and Drug

Administration, Rockville, MD 20852, USA..

Full-text

lee chi@cber.fda.gov

SOURCE: Critical reviews in microbiology, (2005) Vol. 31, No.

3, pp. 137-44. Ref: 75

Journal code: 8914274. ISSN: 1040-841X.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

General Review; (REVIEW)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200510 ENTRY DATE:

Entered STN: 21 Sep 2005

Last Updated on STN: 20 Oct 2005 Entered Medline: 19 Oct 2005

AΒ Host defenses against Streptococcus pneumoniae involve opsonophagocytosis mediated by antibodies and complement. Because the pneumococcus is a respiratory pathogen, mucosal immunity may play an important role in the defense against infection. The mechanism for protection in mucosal immunity consists of induction of immunity by the activation of lymphocytes within the mucosal-associated lymphoid tissues, transport of antigen -specific B and T cells from inductive sites through bloodstream and distribute to distant mucosal effector sites. Secretory IgA is primarily involved in protection of mucosal surfaces. Mucosal immunization is an effective way of inducing immune responses at mucosal surfaces. Several mucosal vaccines are in various stages of development. A number of mucosal adjuvants have been proposed. CpG oligodeoxynucleotide (ODN) has been shown to be an effective mucosal adjuvant for various antigens. Mucosal immunity induced by intranasal immunization was studied with a pneumococcal glycoconjugate, using CpG ODN as adjuvant. Mice immunized with type 9V polysaccharide (PS) conjugated to inactivated pneumolysin (Ply) plus CpG produced high levels of 9V PS IgG and IgA antibodies compared to the group that received the conjugate alone. High levels of subclasses of IgGI, IgG2 and IgG3 antibodies were also observed in sera of mice immunized with 9V PS-Ply plus CpG. In addition, high IgG and IgA antibody responses were observed in sera of young mice immunized with 9V PS-Ply plus CpG or the conjugate plus non-CpG compared with the group received the conjugate alone. These results reveal that mucosal immunization with pneumococcal glycoconjugate using CpG as adjuvant can confer protective immunity against pneumococcal infection.

L8 ANSWER 3 OF 28 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN

ACCESSION NUMBER:

2004-758335 [74] WPIDS

DOC. NO. CPI:

C2004-266164

TITLE: New hyperimmune serum reactive

antigens from Streptococcus

pneumoniae, and encoding nucleic acid

molecules, useful for diagnosing, preventing or

treating S. pneumoniae

infections.

DERWENT CLASS:

B04 D16

INVENTOR(S):

DEWASTHALY, S; HANNER, M; MEINKE, A; NAGY, E;

STIERSCHNEIDER, U

PATENT ASSIGNEE(S):

(INTE-N) INTERCELL AG

COUNTRY COUNT:

109

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

WO 2004092209 A2 20041028 (200474)* EN 191

RW: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR

EP 1615950 A2 20060118 (200606) EN

TT TZ UA UG US UZ VC VN YU ZA ZM ZW

R: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IT LI LT LU LV MC MK NL PL PT RO SE SI SK TR

AU 2004230244 A1 20041028 (200629)

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|------|----------------|----------|
| WO 2004092209 | A2 | WO 2004-EP3984 | 20040415 |
| EP 1615950 | A2 | EP 2004-727537 | 20040415 |
| | • | WO 2004-EP3984 | 20040415 |
| AU 2004230244 | A1 | AU 2004-230244 | 20040415 |
| CN 1774447 | Α | CN 2004-Y10200 | 20040415 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|---------------|-------------|---------------|
| | | |
| EP 1615950 | A2 Based on | WO 2004092209 |
| AU 2004230244 | Al Based on | WO 2004092209 |

PRIORITY APPLN. INFO: EP 2003-450087

20030415

AN 2004-758335 [74] WPIDS

AB WO2004092209 A UPAB: 20041117

NOVELTY - An isolated nucleic acid molecule encoding a hyperimmune **serum** reactive **antigen** or its fragment, is new.

DETAILED DESCRIPTION - An isolated nucleic acid molecule encoding a hyperimmune **serum** reactive **antigen** or its fragment, is new.

The nucleic acid molecule comprises: (a) a nucleic acid molecule comprising any of the 12 nucleotide sequences (e.g. 1248, 2157 or 837 bp) fully defined in the specification;

- (b) a nucleic acid molecule having at least 70% sequence identity to any of the 45 nucleotide sequences (e.g. 366, 138 or 93 bp) fully defined in the specification;
- (c) a nucleic acid molecule having at least 96% sequence identity to any of the 75 nucleotide sequences (e.g. 2631, 633 or 5568 bp) fully defined in the specification; (d) a nucleic acid molecule that is complementary to the nucleic acid molecule in (a), (b) or (c);
- (e) a nucleic acid molecule comprising at least 15 sequential bases of the nucleic acid molecule of (a), (b), (c) or (d); (f) a nucleic acid molecule which anneals under stringent hybridization conditions to the nucleic acid molecule in any of (a)-(e); or
- (g) a nucleic acid molecule which, but for the degeneracy of the genetic code, would hybridize to the nucleic acid molecule in any of (a)-(f).

 INDEPENDENT CLAIMS are also included for the following: (1) a vector comprising the above nucleic acid molecule; (2) a host cell comprising the above vector; (3) a hyperimmune serum-reactive antigen, or its fragments, comprising any of the fully defined amino acid sequences encoded by the nucleic acid molecule and fragments cited above;
- (4) a process for producing a **Streptococcus pneumoniae** hyperimmune **serum** reactive **antigen** or its fragment;
- (5) a process for producing a cell which expresses S. pneumoniae hyperimmune serum reactive antigen or its fragment;
- (6) a pharmaceutical composition, especially a vaccine, comprising the above hyperimmune **serum**-reactive **antigen**, or its fragment, or nucleic acid molecule; (7) an antibody, or its part, which binds at least to a selective part of the
- hyperimmune serum-reactive antigen or its fragment;
- (8) a hybridoma cell line, which produces the antibody cited above;
- (9) a method for producing the above antibody; (10) an antagonist, which binds to the hyperimmune **serum** -reactive **antigen** or its fragment cited above; (11) methods for identifying an antagonist capable of binding to the hyperimmune **serum**-reactive **antigen** or fragment, or an antagonist capable of reducing or

inhibiting the interaction activity of the hyperimmune serum-reactive antigen or its fragment, to its interaction partner; and (12) a process for the in vitro diagnosis of a disease related to expression of the hyperimmune serum-reactive antigen or fragment, or for in vitro diagnosis of a bacterial infection, especially S. pneumoniae infection. ACTIVITY - Antibacterial. No biological data given.

MECHANISM OF ACTION - Vaccine.

USE - The composition (including the nucleic acid molecule, hyperimmune serum-reactive antigen or antibody) is useful for manufacturing a medicament or pharmaceutical preparation (e.g. a vaccine) for treating or preventing S. pneumoniae infections. The antigen or its fragment may also be used for isolating, purifying and/or identifying an interaction partner of the hyperimmune serum reactive antigen or fragment; for generating a peptide binding to the hyperimmune serum reactive antigen or fragment, where the peptide is selected from anticalines; for manufacturing a functional nucleic acid selected from aptamers and spiegelmers; or for manufacturing a functional ribonucleic acid selected from ribozymes, antisense nucleic acids and siRNA (all claimed). Dwg.0/14

L8 ANSWER 4 OF 28 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN

ACCESSION NUMBER:

2004-214262 [20] WPIDS

CROSS REFERENCE: DOC. NO. CPI: 2004-214264 [20] C2004-084758

TITLE:

Method of treating condition associated with abnormal mammalian cell proliferation e.g. cancer, benign tumor and infectious disease involves administering isoleucine derivatives, especially isoleucine

boroproline.

DERWENT CLASS:

B05

106

INVENTOR(S):

ADAMS, S; JESSON, M I; JONES, B; MILLER, G T

PATENT ASSIGNEE(S):

(POIN-N) POINT THERAPEUTICS INC

COUNTRY COUNT:

PATENT INFORMATION:

| PATI | ENT | NO | <u></u> . | | KII | ND I | DATI | E | | VEE | ζ | | LΑ | ļ | PG | | | | | | | |
|------|------|------|-----------|----|-----|------|------|-------|-----|------|-------|----|-----|-----|---------------|----|----|----|----|----|-----|----|
| WO 2 | 2004 | 4004 | 165 | 3 | A2 | 200 | 040 | 115 | (20 | 0042 | 20) 3 | EN | 1] | L52 | _ | | | | | | | |
| I | ₹W: | ΑT | ΒE | BG | CH | CY | CZ | DE | DK | EA | EΕ | ES | FI | FR | GB | GH | GM | GR | HU | ΙE | IT | KE |
| • | | LS | LU | MC | MW | ΜZ | NL | OA | PT | RO | SD | SE | SI | SK | \mathtt{SL} | SZ | TR | TZ | UG | ZM | ZW | |
| | W: | ΑE | AG | AL | AM | AΤ | ΑU | ΑZ | ΒA | BB | BG | BR | BY | ΒZ | CA | CH | CN | CO | CR | CU | CZ. | DE |

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ.DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA

UG UZ VC VN YU ZA ZW

US 2004077601 A1 20040422 (200428)

AU 2003265264 Al 20040123 (200459)

EP 1578434 A2 20050928 (200563) EN

R: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU

LV MC MK NL PT RO SE SI SK TR

IN 2005000151 P2 20050916 (200582) EN

IN 2005000152 P2 20051007 (200608) EN

JP 2006507352 W 20060302 (200621) 239

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|--------------------------------|-------------------|------------------------------------|----------|
| WO 2004004658 US 2004077601 | A2 Al Provisional | WO 2003-US21405 US 2002-394856P | 20030709 |

| | Provisional Provisional | US 2002-414978P US 2003-466435P | 20021001 20030428 |
|---------------|----------------------------|------------------------------------|----------------------|
| | | US 2003-616694 | 20030709 |
| AU 2003265264 | A1 | AU 2003-265264 | 20030709 |
| EP 1578434 | A2 | EP 2003-763380. | 20030709 |
| • | | WO 2003-US21405 | 20030709 |
| IN 2005000151 | P2 | WO 2003-US21405 | 20030709 |
| | | IN 2005-KN151 | 20050208 |
| IN 2005000152 | P2 | WO 2003-US21547 | 20030709 |
| | | IN 2005-KN152 | 20050208 |
| JP 2006507352 | ₩ . | WO 2003-US21405 | 20030709 |
| | | JP 2004-562634 | 20030709 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|-----------------------|--|--|
| AU 2003265264 | Al Based on | WO 2004004658 |
| EP 1578434 2 | A2 Based on | WO 2004004658 |
| JP 2006507352 V | W Based on | WO 2004004658 |
| PRIORITY APPLN. INFO: | US 2003-466435P 2002-394856P 2002-414978P 2003-616694 2003-464435P | 20030428; US 20020709; US 20021001; US 20030709; US 20030428 |
| AN 2004-214262 [20] | WPIDS | |

CR 2004-214264 [20]

AB W02004004658 A UPAB: 20060328

NOVELTY - Method (M1) of treating a condition associated with abnormal mammalian cell proliferation, involves administering isoleucine derivatives (I) by injection or in an enterically coated form DETAILED DESCRIPTION - Method (M1) of treating a condition associated with abnormal mammalian cell proliferation, involves administering isoleucine derivatives of formula Am-NH-CH(CH(CH3)-CH2- CH3)-C(=0)-A1-R (I) (disclosed) by injection or in an enterically coated form.

A and A1 = L or D amino acids; m = 0-10;

 $R = organo\ borates$, organo phosphonates, fluoroalkylketones, alphaketos, N-peptiolyl-O-(acylhydroxylamine), azapeptide, azetidine, fluoroolefin dipeptide isoester, peptidyl (alpha -aminoalkyl) phosphonate ester, aminoacyl pyrrolidine-2-nitrile or 4-cyano-thiazolidide.

INDEPENDENT CLAIMS are included for following: (1) treating (M2) an infectious disease involving administering (I) by injection or in an enterically coated form; (2) a pharmaceutical preparation (P1) comprising (I) (0.005 - less than 1 mg/kg/day) and a carrier; (3) a kit (K1) comprising a housing and (P1); (4) a pharmaceutical preparation (P2) comprising (I) (less than 1 mg/kg/day). (P2) Is provided in a vial or ampoule with a septum; (5) a kit (K2) comprising a housing containing (I) in a first container and a carrier in a second container. (I) Is in dried form; (6) a kit (K3) comprising housing containing (I) dissolved in acid solution in a first container and a neutral or basic isotonic diluent in a second container; (7) a kit (K4) comprising (I) in a first container and instructions for diluting (I) in neutral or acidic injectable diluent; (8) a composition (C1) comprising (I) and antibody or its fragment;

(9) stimulating (M3) an immune response involving administering (I) and an antigen by injection or in an enterically coated form;

(10) stimulating (M4) an immune response in an immunocompromised subject involving administration of (I) to induce interleukin (IL)-1; (11) treating (M5) a subject having or a risk of developing an interferon (IFN)-responsive condition involving administering (I); (12) treating (M6) a subject having a

risk of developing cancer involving administering (I) and an enzyme inhibitor selected from tyrosine kinase inhibitor, CDK inhibitor, mitogen activated protein (MAP) kinase inhibitor and epidermal growth factor receptor (EGFR) inhibitor; and

(13) a composition (C2) comprising (I) and a cancer **antigen** or microbial **antigen**.

ACTIVITY - Cytostatic; Antidiabetic; Antimicrobial; Antibacterial; Antitubercular; Tuberculostatic; Virucide; Anti-HIV; Fungicide; Antiparasitic; Antiinflammatory; Hepatotropic; Neuroprotective.

Mice were inoculated subcutaneously with WEHI 164 tumor cells and administered isoleucine-boroproline (a) (2 micro g) twice daily from 2-9 days after tumor inoculation. Control mice received saline. It was observed that in mice receiving (a), the tumor size was smaller as compared to that in control treated mice.

MECHANISM OF ACTION - Abnormal angiogenesis inhibitor; An **antigen**-specific immune response (e.g. innate immune response or an adaptive immune response) stimulator.

USE - For the treatment of a condition associated with abnormal mammalian cell proliferation, e.g. cancer (including basal cell carcinoma, biliary tract cancer, bladder cancer, bone cancer, brain cancer, breast cancer, cervical cancer, choriocarcinoma, CNS cancer, colon and rectum cancer, connective tissue cancer, cancer of the digestive system, endometrial cancer, esophageal cancer, eye cancer, cancer of the head and neck, gastric cancer, intraepithelial neoplasm, kidney cancer, larynx cancer, leukemia, acute myeloid leukemia, acute lymphoid leukemia, chronic myeloid leukemia, chronic lymphoid leukemia, liver cancer, small cell lung cancer, non-small cell lung cancer, lymphoma, Hodgkin's or non-Hodgkin's lymphoma, melanoma, myeloma, neuroblastoma, oral cavity cancer, ovarian cancer, pancreatic cancer, prostate cancer, retinoblastoma, rhabdomyosarcoma, rectal cancer, renal cancer, cancer of the respiratory system, sarcoma, skin cancer, stomach cancer, testicular cancer, thyroid cancer, uterine cancer, cancer of the urinary system and metastasis), premalignant condition, benign tumor or an infectious disease (e.g. bacterial infection (including an Escherichia coli infection, Staphylococcal infection, a Streptococcal infection, a Pseudomonas infection, Clostridium difficile infection, Legionella infection, Pneumococcus infection, Haemophilus infection, Klebsiella infection, Enterobacter infection, and Citrobacter infection, Neisseria infection, Shigella infection, Salmonella infection, Listeria infection, Pasteurella infection, Streptobacillus infection, Spirillum infection, Treponema infection, Actinomyces infection, Borrelia infection, Corynebacterium infection, Nocardia infection, Gardnerella infection, Campylobacter infection, Spirochaeta infection, Proteus infection, Bacteriodes infection, Helicobacter pylori infection, and anthrax infection), mycobacterial infections (including tuberculosis and leprosy), viral infections (e.g. an HIV infection, a Herpes simplex virus 1 infection, a Herpes simplex virus 2 infection, cytomegalovirus infection, hepatitis A virus infection, hepatitis B virus infection, hepatitis C virus infection, human papilloma virus infection, Epstein Barr virus infection, rotavirus infection, adenovirus infection, influenza A virus infection, respiratory syncytial virus infection, varicella-zoster virus infections, small pox infection, monkey pox infection and SARS infection), fungal infections (e.g. candidiasis, ringworm, histoplasmosis, blastomycosis, paracoccidioidomycosis, crytococcosis, aspergillosis, chromomycosis, mycetoma infections, pseudallescheriasis, and tinea versicolor infection) and parasitic infection (e.g. amebiasis, Trypanosoma cruzi infection, Fascioliasis, Leishmaniasis, Plasmodium infections, Onchocerciasis, Paragonimiasis, Trypanosoma brucei infection, Pneumocystis infection, Trichomonas vaginalis infection, Taenia infection, Hymenolepsis infection, Echinococcus infections, Schistosomiasis, neurocysticercosis, Necator americanus infection and Trichuris trichuria infection)), for treating gingivitis, osteomyelitis, diabetes type I, diabetes type II, chronic granuloma, chronic hepatitis B or C infection, chronic EBV

infection, chronic Epstein Barr virus infection, multiple sclerosis; for stimulating immune response in a subject at risk of developing cancer due to familiar predisposition (including familial colon polyposis, precancerous polyps, precancerous HPV lesions). (All claimed.)

ADVANTAGE - (I) Increases lymphoid tissue levels of IL-1 (IL-1 alpha or 1 beta), granulocyte-colony stimulating factor (G-CSF) or IL-8 and does not increase serum IL-1 level. The compound shortens the vaccination course by at least one immunization or by at least one day.

Dwg.0/2

L8 ANSWER 5 OF 28 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights

reserved on STN

ACCESSION NUMBER:

2004254740 EMBASE Full-text

TITLE:

Development of experimental carbohydrate-conjugate

vaccines composed of Streptococcus

pneumoniae capsular polysaccharides and the
universal helper T-lymphocyte epitope (PADRE®).

AUTHOR:

Alexander J.; Del Guercio M.-F.; Frame B.; Maewal A.;

Sette A.; Nahm M.H.; Newman M.J.

CORPORATE SOURCE:

J. Alexander, Epimmune Inc., 5820 Nancy Ridge Drive,

San Diego, CA 92121, United States.

jalexander@epimmune.com

SOURCE:

Vaccine, (23 Jun 2004) Vol. 22, No. 19, pp. 2362-2367.

Refs: 35

ISSN: 0264-410X CODEN: VACCDE

PUBLISHER IDENT.:

S 0264-410X(04)00241-5

COUNTRY: '

United Kingdom

DOCUMENT TYPE:

Journal; Conference Article

FILE SEGMENT:

026 Immunology, Serology and Transplantation

037 Drug Literature Index

039 Pharmacy

LANGUAGE:

English

SUMMARY, LANGUAGE:

English

ENTRY DATE:

Entered STN: 9 Jul 2004

Last Updated on STN: 9 Jul 2004

AB Experimental carbohydrate-conjugate vaccines composed of the 13 amino acid universal Pan HLA-DR Epitope (PADRE) and Streptococcus pneumoniae capsular polysaccharides from serotypes 14, 6B and 9V were produced. Simple carbodiimide-mediated condensation chemistry was used to conjugate the PADRE synthetic peptide to the three chemically different capsular polysaccharides in a 1:1 molar ratio. The immunogenicity of the PADRE peptide component of the conjugate vaccines was confirmed by the induction of PADRE-specific CD4 (+) helper T cell (HTL) responses following immunization of C57BL/6 mice. High titer antibody responses specific for polysaccharides of S. pneumoniae serotypes 14, 6B and 9V were induced using Complete Freund's Adjuvant (CFA) and alhydrogel Al(OH)(3) formulations. The HTL, or carrier, effect of the PADRE synthetic peptide was only evident using the PADRE-polysaccharide conjugates; simple mixtures of the PADRE peptide and polysaccharides were essentially nonimmunogenic. The functional or potential protective value of the polysaccharide-specific antibodies was measured as a function of opsonophagocytic activity for the 6B serotype. High titers of opsonophagocytic activity were measured in sera from mice immunized with formulations containing both adjuvants. These data demonstrate that the PADRE synthetic peptide can induce the HTL responses needed to support the development of antibodies specific for bacterial carbohydrates used in conjugate vaccines. . COPYRGT. 2004 Published by Elsevier Ltd.

L8 ANSWER 6 OF 28 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN ACCESSION NUMBER: 2003-900679 [82] WPIDS CROSS REFERENCE: 1993-182553 [22]; 1999-095007 [08]; 2001-289821 [30]; 2003-801248 [75] DOC. NO. NON-CPI: N2003-719058 DOC. NO. CPI: C2003-256074 TITLE: Novel nucleic acid encoding Streptococcus pneumoniae 37-kDa surface adhesion A protein useful for preventing Streptococcus pneumoniae infection in subject. **DERWENT CLASS:** B04 D16 S03 ADES, E W; CARLONE, G M; RUSSELL, H; SAMPSON, J; INVENTOR(S): THARPE, J A PATENT ASSIGNEE(S): (ADES-I) ADES E W; (CARL-I) CARLONE G M; (RUSS-I) RUSSELL H; (SAMP-I) SAMPSON J; (THAR-I) THARPE J A; (USSH) US DEPT HEALTH & HUMAN SERVICES COUNTRY COUNT:

COUNTRY COUNT:
PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG
----US 2003204074 A1 20031030 (200382)* 21
US 7045132 B2 20060516 (200633)

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|-----------|-----------------|----------|
| US 2003204074 | Al CIP of | US 1991-791377 | 19911114 |
| | CIP of | US 1994-222179 | 19940404 |
| | Div ex | US 1996-715131 | 19960917 |
| • | Div ex | US 1998-221753 | 19981228 |
| | Div ex | US 2001-754809 | 20010103 |
| | | US 2003-455109 | 20030604 |
| US 7045132 | B2 CIP of | US 1991-791377 | 19910917 |
| · * | CIP of | US 1994-222179. | 19940404 |
| | Div ex | US 1996-715131 | 19960917 |
| | Div ex | US 1998-221753 | 19981228 |
| | Div ex | US 2001-754809 | 20010103 |
| | | US 2003-455109 | 20030604 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|-----------------------|----------------|--------------|
| US 2003204074 | Al CIP of | US 5422427 |
| | Div ex | US 5854416 |
| | Div ex | US 6217884 |
| US 7045132 | B2 CIP of | US 5422427 |
| | Div ex | US 5854416 |
| | Div ex | US 6217884 |
| • | Div ex | US 6773880 |
| PRIORITY APPLN. INFO: | US 1996-715131 | 19960917; US |
| | 1991-791377 | 19911114; US |
| | 1994-222179 | 19940404; US |
| | 1998-221753 | 19981228; US |
| | 2001-754809 | 20010103; US |
| | 2003-455109 | 20030604 |
| AN 2003-900679 [82] | WPIDS | |

CR 1993-182553 [22]; 1999-095007 [08]; 2001-289821 [30]; 2003-801248 [75] AB US2003204074 A UPAB: 20060523

NOVELTY - An isolated nucleic acid (I) encoding the 37-kDa protein of **Streptococcus pneumoniae**, which has a fully defined sequence (S1) of 309 amino acids as given in specification, is new.

- DETAILED DESCRIPTION INDEPENDENT CLAIMS are included for the following:
 (1) an isolated nucleic acid (II) comprising a unique fragment of at least 10 nucleotides of the nucleic acid having a fully defined sequence (S2) of 1330 nucleotides as given in specification; (2) an isolated nucleic acid comprising a sequence of aggatctaatgaaaaaattag or tcagaggcttattttgccaat; (3) a purified polypeptide (III) encoded by (S2); (4) a purified polypeptide (IV) encoded by (II); (5) a purified antibody (V) which selectively binds with (III) or (IV); (6) a vaccine (VI) comprising an immunogenic polypeptide of (III) or (IV) and a carrier;
- (7) detecting the presence of the **S.pneumoniae** in a sample, involves contacting a sample suspected of containing S.pneumoniae with nucleic acid primers capable of hybridizing to a nucleic acid comprising a unique portion of (I), amplifying the nucleic acid comprising a portion of (I), and detecting the presence of an amplification product, the presence of the amplification product indicating the presence of S. pneumoniae in the sample; and (8) preventing S.pneumoniae in a subject, involves administering to the subject an anti-idiotype antibody to (III) or (IV), and a carrier. ACTIVITY - Antibacterial. Twenty CBA/CaHN/J mice carrying the xid (x-linked immunodeficiency) mutation were tested for protection against a virulent type 3 S.pneumoniae strain, WU2. Mice were anesthetized and bled intraorbitally to obtain pre-immunization sera. The 37-kDa protein (pneumococcol fimbrial protein A) was emulsified in complete Freund's adjuvant (CFA) to a protein concentration of 54 mu g/ml. Ten mice were injected subcutaneously into 2auxiliary and 2 inguinal sites at 0.1 ml per site, delivering approximately 22 mu g protein/mouse. Ten control mice were treated identically with CFA and buffer substituting for protein. Fourteen days later, the ten test mice were injected intraperitoneally (IP) with 100 mu g of the 37-kDa protein, controls were injected IP with buffer, eight days following the IP immunizations, all mice were bled intraorbitally to obtain post-immunization sera, and challenged intravenously (IV) with 60 CFU of a log phase culture of S.pneumoniae strain WU2, a virulent capsular type 3 strain. Mice were observed for 21 days, and deaths were recorded. The results showed that all of the ten mice immunized with 37 kDa protein survived and only two out of the nineteen control mice survived.

MECHANISM OF ACTION - Vaccine (claimed).

USE - (III) or (IV) is useful for detecting the presence of **S.pneumoniae** in a subject, which involves contacting an antibody containing sample from the subject with (III) or (IV), and detecting the binding of the antibody with the polypeptide, where the binding indicates the presence of **S.pneumoniae** in the subject. (V) is useful for detecting the presence of **S. pneumoniae** in a subject, which involves contacting a sample from the subject with (V), and detecting the binding of the antibody with an **antigen**, where the binding indicates the presence of **S.pneumoniae** in the subject. (V) is useful for treating a **S.pneumoniae** infection in a subject, which involves administering (V) to the subject and a carrier. (VI) is useful for preventing **S.pneumoniae** infection in a subject, which involves administering (VI) to the subject and a carrier (all claimed).

L8 ANSWER 7 OF 28 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on

ACCESSION NUMBER: 2004:41016 BIOSIS Full-text

DOCUMENT NUMBER: PREV200400041595

TITLE: Streptococcus pneumoniae (Pnc) cell

wall proteins (CWP) fructose-biphosphate aldolase (FBA) and glycerol phosphate dehydrogenase (GAPDH) as vaccine

candidates.

AUTHOR(S): Nebenzahl, Y.

Nebenzahl, Y. Mizrachi [Reprint Author]; Ling, E. [Reprint Author]; Feldman, G. [Reprint Author]; Portnoy, M. [Reprint Author]; Dagan, R. [Reprint

Author]

CORPORATE SOURCE:

Ben-Gurion Univ., Beer-Sheva, Israel

SOURCE:

Abstracts of the Interscience Conference on

Antimicrobial Agents and Chemotherapy, (2003) Vol. 43,

pp. 284. print.

Meeting Info.: 43rd Annual Interscience Conference on Antimicrobial Agents and Chemotherapy. Chicago, IL, USA. September 14-17, 2003. American Society for

Microbiology.

DOCUMENT TYPE:

Conference; (Meeting)

Conference; Abstract; (Meeting Abstract)

LANGUAGE:

English

ENTRY DATE:

Entered STN: 14 Jan 2004

Last Updated on STN: 14 Jan 2004

Background: Protein-based Pnc vaccines are needed to overcome the limitations AΒ of polysaccharide-based vaccines. Antibody response to Pnc polypeptide antigens is age dependent. We hypothesize that immunization with Pnc proteins, that are recognized more often by older children than by infants would induce protective immune response. This was tested in the mouse model. Methods: Pnc CWP were extracted by mutanolysin from unencapsulated Pnc DW3.8, and separated by 2D PAGE. Western blots were probed with sera obtained longitudinally from day care center attendees aged 18, 30 and 42m, and from adults. 3 proteins were sequenced, cloned, expressed, purified, and used for immunization of 80 BALB/c mice. Each mouse was immunized with 25mg protein and Alum adjuvant in 50ml PBS and boosted 3w later. Control mice were immunized with Alum only. The mice were challenged intranasally with 108 CFU of Pnc. Survival was monitored. Results: 20/150 proteins identified on the 2D PAGE by Commassie Blue staining were poorly recognized by sera from children aged 18m (n=8). Heat shock protein 70 (HSP70) was poorly recognized And no increase in its recognition with age occurred. In contrast, FBA and GAPDH were recognized by the children at ages 30-42m and by adults. Immunization of mice with recombinant (r) HSP70, FBA and GAPDH elicited antibodies that recognized HSP70, FBA and GAPDH in the Pnc DW3.8 strain as well as in clinical isolates of serotypes 14, 9V and 6B. Following intranasal challenge with capsulated Pnc serotype 3, none of the controls or HSP70immunized mice survived. In contrast, 36% of rFBA or rGAPDH immunized mice survived (p<.05). Conclusions: 1) Antibodies to FBA and GAPDH increased with age in childhood; 2) immunization of mice with rFBA and rGAPDH elicited antibodies that recognized those proteins in all 4 Pnc strains tested; 3) Mice immunized with rFBA and rGAPDH were partially protected after a lethal intranasal challenged with Serotype 3.

L8 ANSWER 8 OF 28 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN

ACCESSION NUMBER:

2002-463352 [49] WPIDS

DOC. NO. CPI:

C2002-131753

TITLE:

Novel Streptococcus pneumoniae

iron uptake ABC transporter peptide, useful in screening assay for identifying antimicrobial drug and in diagnostic assay for detecting streptococcal

microorganism.

DERWENT CLASS:

B04 C06 D16

INVENTOR(S):

BROWN, J S; HOLDEN, D W

PATENT ASSIGNEE(S):

(UNLO) IMPERIAL COLLEGE INNOVATIONS LTD; (IMCO-N)

IMPERIAL COLLEGE INNOVATIONS LTD; (BROW-I) BROWN J S; (HOLD-I) HOLDEN D W

COUNTRY COUNT:

PATENT INFORMATION:

99

| PA | CENT | ИО | | | KII | ND I | TAC | Ξ | 7 | WEE | K | | LA | 1 | PG | | | | | | | |
|----|------|-----|------|-------|------------|------|------|---------------|-----|------|------------------|---------------|-----|---------|----|----|----|----|----|----|----|----|
| WO | 200 | 203 | 477: | 3 | A2 | 200 | 020 | 502 | (20 | 002 | 19) ⁻ | EI | 1 : | 159 | _ | | | | | | | |
| | RW: | ΑT | BE | СН | CY | DE | DK | EA | ES | FI | FR | GB | GH | GM | GR | ΙE | ΙT | KE | LS | LU | MC | MW |
| | | MZ | NL | ΟA | PΤ | SD | SE | \mathtt{SL} | SZ | TR | TZ | UG | ZW | | | | | | | | | |
| | W: | ΑE | ΑĠ | AL | AM | ΑT | AU | ΑZ | BA | BB | BG | BR | BY | BZ | CA | CH | CN | CQ | CR | CU | CZ | DE |
| | | DK | DM | DZ | EC | EE | ES | FI | GB | GD | GE | GH | GM | HR | HU | ID | IL | IN | IS | JP | KE | KG |
| | | ΚP | KR | ΚZ | LC | LK | LR | LS | LT | LU | LV | MA | MD | MG | MK | MN | MW | MX | ΜZ | NO | ΝZ | OM |
| | | PH | PL | PT | RO | RU | SD | $\cdot SE$ | SG | SI | SK | \mathtt{SL} | TJ | TM | TR | TT | TZ | UA | UG | US | UZ | VN |
| | | YU | ZA | zw | | | | | | | | | | | | | | | | | | |
| ΑU | 200 | 109 | 579 | 5 | Α | 200 | 205 | 506 | (20 | 0025 | 57) | | | | | | | | | | | |
| ΕP | 133 | 047 | 3 · | | A2 | 200 | 0301 | 730 | (20 | 0035 | 50) | EN | 1 | | | | | | | | | |
| | R: | AL | ΑT | BE | CH | CY | DE | DK | ES | FI | FR | GB | GR | ΙE | IT | LI | LT | LU | LV | MC | MK | NL |
| | | PT | RO | SE | SI | TR | | | | | | | | | | | | | | | | |
| US | 200 | 411 | 666: | Ĺ | A 1 | 200 | 406 | 517 | (20 | 0044 | 10) | | | | | | | | | | | |
| JΡ | 200 | 452 | 1613 | 3 | W | 200 | 407 | 722 | (20 | 0044 | 18) | | 2 | 200 | | | | | | | | |
| ΑU | 200 | 129 | 5795 | 5 | A8 | 200 |)51(|)13 | (20 | 006 | L6) | | | | | | | | | | | |

APPLICATION DETAILS:

| D A | PPLICATION | DATE |
|-----|--|--|
| WO | 2001-GB4749 | 20011026 |
| AU | 2001-95795 | 20011026 |
| EP | 2001-976527 | 20011026 |
| WO | 2001-GB4749 | 20011026 |
| WO | 2001-GB4749 | 20011026 |
| US | 2003-415478 | 20030905 |
| WO | 2001-GB4749 | 20011026 |
| JP | 2002-537762 | 20011026 |
| AU | 2001-295795 | 20011026 |
| | WO AU EP WO WO US WO JP | WO 2001-GB4749 AU 2001-95795 EP 2001-976527 WO 2001-GB4749 WO 2001-GB4749 US 2003-415478 WO 2001-GB4749 JP 2002-537762 |

FILING DETAILS:

| PA: | TENT NO | KI) | ND | | I | PATENT NO | | | | |
|---------|----------|---------|---------|----------|-----|-----------|---------|--|--|--|
| AU | 2001095 | 795 A | Based | on | WO | 20020347 | 173 | | | |
| EP | 1330473 | A2 | Based | on | WO | 20020347 | 173 | | | |
| JP | 2004521 | 613 W | Based | on | WO | 20020347 | 773 | | | |
| . AU | 2001295 | 795 A8 | Based | on | WO | 20020347 | 773 | | | |
| PRIORIT | Y APPLN. | INFO: U | s 2001- | -288118F | ? 2 | 20010502; | GB | | | |

PRIORITY APPLN. INFO: US 2001-288118P 20010502; GB 2000-28345 2000121; GB 2001-2666 20010202

AN 2002-463352 [49] WPIDS

AB WO 200234773 A UPAB: 20020802

NOVELTY - A **Streptococcus pneumoniae** iron uptake ABC transporter peptide (I) called Streptococcal iron transporter (Sit) 1, Sit2 or Sit3, encoded by gene (G) Sit1 A, B, C, Sit2 B, C or D, Sit3 A, B, C or D, open reading frame (ORF) 1-14 or MS 1-11, or its functional fragment, for therapeutic or diagnostic use, or a peptide encoded within **pneumococcal** pathogenicity island 1, identified as PP11, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following: (1) a polynucleotide (II) encoding (I), for therapeutic or diagnostic use;

- (2) an attenuated microorganism (III) comprising a mutation that disrupts expression of GS;
- (3) a construct (IV) comprising a promoter naturally associated with GS, and a heterologous gene;
- (4) a vaccine (Va) comprising (I), (II) or (III); (5) a vaccine (Vb) comprising a peptide encoded by Sit1D and a peptide encoded by Sit2A, or its functional fragment, capable of eliciting an immune response;
- (6) use of a peptide encoded by the Sit2A gene or Sit1D gene, in a screening assay for the identification of an antimicrobial drug, and in a diagnostic assay for the detection of a streptococcal microorganism; and
- (7) an antibody (Ab) raised against any (I) or (II). ACTIVITY Antibacterial.

MECHANISM OF ACTION - Vaccine. BALBc mice were given 10 micro g of protein intraperitoneally (IP), three times separated by 7-10 days, and then challenged 2 weeks after the last immunization with 10000 Streptococcus pneumoniae cells inoculated IP. Alum was used as a negative control, and the non-toxic pneumolysin variant, termed Pdb, was used as a positive control (known to be protective). The other proteins were Sit1D, Sit2A, Sit1D combined with Sit2A, Sit1D combined with Pdb, and Sit2A combined with Pbd. Essentially, both Sit1D and Sit2A were as protective as Pdb, and the combination of Sit1D and Sit2A was very protective (80% long term survivors compared to 0% in the alum group). Combinations of Pdb and either Sit1D or Sit2A had no additional protective benefit over the individual proteins. To show that the protective effect is antibody-mediated, the serum from immunized mice was given IP to another group of naive mice, and then the mice were challenged with 3000 bacteria. The results showed a clear benefit for the group receiving the combined Sit1DlSit2A antisera. The clear positive result with the Sit1DlSit2A antisera confirmed that the protective effect of immunization with Sit1D and Sit2A is a serum, i.e. antibody, dependent phenomena.

USE - (I) and (II) are useful in therapeutic or diagnostic purposes. (I), (III), (III) or (IV) is useful in a screening assay for the identification of an antimicrobial drug, and in a diagnostic assay for the detection of a streptococcal microorganism. (I), (III), (III) or (IV) is useful for the manufacture of a medicament for the treatment or prevention of a condition associated with infection by **S.pneumoniae** or other gram positive bacteria, preferably for veterinary treatment (claimed). (I) is also useful in the production of monoclonal and polyclonal antibodies for use in passive immunization. (I) is useful in the preparation of vaccines for the treatment of infection, as **antigens**, and in the preparation of attenuated microorganisms for use as live oral vaccines.

ADVANTAGE - (Vb) offers improved protection compared to the known protective antigen non-toxic pneumolysin (Pdb). Dwg.0/8

L8 ANSWER 9 OF 28 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN

ACCESSION NUMBER:

2002-351845 [38] WPIDS

CROSS REFERENCE: DOC. NO. CPI:

2002-362308 [39] C2002-099959

TITLE:

New immunogenic composition for treating

streptococcal infections in infants and elders,

comprises two Streptococcus

pneumoniae proteins selected from the poly
histidine triad family and the choline binding

protein family .

DERWENT CLASS:

B04 D16

INVENTOR(S):
PATENT ASSIGNEE(S):

HERMAND, P; LAFERRIERE, C A J; LOBET, Y; POOLMAN, J

(SMIK) SMITHKLINE BEECHAM BIOLOGICALS; (SMIK)

SMITHKLINE BEECHAM BIOLOGICALS SA; (GLAX)

GLAXOSMITHKLINE BIOLOGICALS SA; (HERM-I) HERMAND P; (LAFE-I) LAFERRIERE C A J; (LOBE-I) LOBET Y; (POOL-I)

98

PATENT INFORMATION:

| PA | TENT. | ИО | | | KI | ND I | OATI | Ξ | V | VEE | K | | LA | ì | PG | | | | | | | |
|----|-------|------|------|----|--------|------|--------------|---------------|-----|------|------------------|------|----|----|----|----|----|----|----|----|----|-----|
| WO | 200 | 2022 | 216 | 3 | A2 | 200 | 0203 | 321 | (20 | 0023 | 38) ¹ | * E1 | 1 | 28 | - | | | | | | | |
| | RW: | ΑT | ΒE | CH | CY | DE | DK | EΑ | ES | FI | FR | GB | GH | GM | GR | ΙE | IT | KE | LS | LU | MC | MW |
| | | MZ | NL | OA | PT | SD | SE | \mathtt{SL} | SZ | TR | TZ | UG | ZW | | | | | | | | | |
| | W: | | | | | ΑT | | | | | | | | | | | | | | | | |
| | | | | | | EE | | | | | | | | | | | | | | | | |
| | | | | | | LK | | | | | | | | | | | | | | | | |
| | | | | RO | RU | SD | SE | SG | SI | SK | \mathtt{SL} | ТJ | TM | TR | TT | ΤZ | UΑ | UG | US | UZ | VN | YU |
| | | | ZW | | | | | | | | | | | | | | | | | | | |
| | 2002 | | | 3 | Α | | | | (20 | | | | | | | | | | | | | |
| EP | 131 | | | | | 200 | | | | | | EN | | | | | | | | | | |
| | R: | | | | | CY | DE | DK | ES | FΙ | FR | GB | GR | ΙE | ΙT | LI | LT | LU | r | MC | MK | ΝL |
| | 000 | | | | SI | TR | | | | | | | | | | | | | | | | |
| | 200 | | | _ | Α | | | | (20 | | | | | | | | | | | | | |
| | 2003 | | | | A | | | | (20 | | | | | | | | | | | | | |
| | 2003 | | | | A | | | | (20 | | | | | | | | | | | | | |
| | 200 | | | | A A | |)304)304 | | ٠. | 035 | • | | | | | | | | | | | |
| | 2003 | | | | | 200 | | | | 035 | | | | | | | | • | | | | |
| | 2003 | | | - | | 200 | | | - | 037 | - | | | | | | | | | | | |
| | 2004 | | | | W | | | | (20 | | - | | | 50 | | | | | | | | |
| | 2004 | | | | | 200 | | | | 042 | | | | 30 | | | | | | | | |
| | 147 | | | • | A | | 402 | | • | 043 | • | | | | | | | | | | | |
| | 2003 | | | ı | A | 200 | | | • | 044 | | | | 44 | | | | | | | | |
| | 2003 | | | _ | A | | | | • | 046 | | | | 55 | | | | | | | | |
| | 5242 | | | | Α | 200 | | | • | | | | | 93 | | | | | | | | |
| | 2002 | | 3193 | 3 | | 200 | | | - | 053 | - | | | | | | | | | | | |
| | 2003 | | | | | 200 | | | | 056 | | | | | | | | | | | | |
| CN | 1694 | 1723 | 3 | | A | 200 | | | • | | | | | | | | | | | | | |
| CN | 1253 | 3205 | 5 | ı | С | 200 | | | (20 | | | | | | | | | | | | | ٠., |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|------------|-----------------|----------|
| WO 2002022168 | A2 | WO 2001-EP10570 | 20010912 |
| AU 2002038193 | Α | AU 2002-38193 | 20010912 |
| EP 1317280 | A2 | EP 2001-984627 | 20010912 |
| | | WO 2001-EP10570 | 20010912 |
| BR 2001013822 | Α | BR 2001-13822 | 20010912 |
| , | | WO 2001-EP10570 | 20010912 |
| NO 2003001183 | Α | WO 2001-EP10570 | 20010912 |
| | | NO 2003-1183 | 20030314 |
| NO 2003001184 | Α | WO 2001-EP10568 | 20010912 |
| | | NO 2003-1184 | 20030314 |
| KR 2003031187 | Α | KR 2003-703731 | 20030314 |
| KR 2003031188 | Α | KR 2003-703732 | 20030314 |
| HU 2003001043 | A2 | WO 2001-EP10570 | 20010912 |
| | | HU 2003-1043 | 20010912 |
| CZ 2003000757 | A3 | WO 2001-EP10570 | 20010912 |
| | | CZ 2003-757 | 20010912 |
| JP 2004508417 | W | WO 2001-EP10570 | 20010912 |
| | | JP 2002-526417 | 20010912 |
| US 2004081662 | A 1 | WO 2001-EP10570 | 20010912 |
| | | US 2003-380563 | 20031008 |

| N | 1477970 | A | CN | 2001-815748 | 20010912 |
|---|-------------------------|---|---|---|--|
| Α | 2003001524 | A | ZA | 2003-1524 | 20030225 |
| Α | 2003001526 | A | ZΑ | 2003-1526 | 20030225 |
| Z | 524287 | A | ΝZ | 2001-524287 | 20010912 |
| | | | WΟ | 2001-EP10570 | 20010912 |
| U | 2002238193 | B2 | AU | 2002-238193 | 20010912 |
| X | 2003002265 | A1 | WO | 2001-EP10570 | 20010912 |
| | | | ΜX | 2003-2265 | 20030314 |
| N | 1694723 | A | CN | 2001-815746 | 20010912 |
| N | 1253205 | С | CN | 2001-815748 | 20010912 |
| | A A IZ U IX | EN 1477970 EA 2003001524 EA 2003001526 EZ 524287 EU 2002238193 EX 2003002265 EN 1694723 EN 1253205 | A 2003001524 A A 2003001526 A C 524287 A AU 2002238193 B2 EX 2003002265 A1 EN 1694723 A | A 2003001524 A ZA A 2003001526 A ZA Z 524287 A NZ AU 2002238193 B2 AU X 2003002265 A1 WO MX XN 1694723 A CN | A 2003001524 A ZA 2003-1524 A 2003001526 A ZA 2003-1526 A 2003-1526 A 2003-1526 A 2003-1526 A 2003-1526 A 2003-1526 A 2003-1527 A 2001-524287 WO 2001-EP10570 AU 2002-238193 EX 2003002265 A1 WO 2001-EP10570 MX 2003-2265 EN 1694723 A CN 2001-815746 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|---------------|-------------------|---------------|
| AU 2002038193 | A Based on | WO 2002022168 |
| EP 1317280 | A2 Based on | WO 2002022168 |
| BR 2001013822 | A Based on | WO 2002022168 |
| HU 2003001043 | A2 Based on | WO 2002022168 |
| CZ 2003000757 | A3 Based on | WO 2002022168 |
| JP 2004508417 | W Based on | WO 2002022168 |
| NZ 524287 | A Based on | WO 2002022168 |
| AU 2002238193 | B2 Previous Publ. | AU 2002238193 |
| | Based on | WO 2002022168 |
| MX 2003002265 | Al Based on | WO 2002022168 |

PRIORITY APPLN. INFO: GB 2000-22742

20000915

AN 2002-351845 [38] WPIDS

CR 2002-362308 [39]

AB WO 200222168 A UPAB: 20060922

NOVELTY - An immunogenic composition (I) comprising at least two **Streptococcus pneumoniae** proteins selected from poly histidine triad family (PhtX), choline binding protein family (CbpX), CbpX truncates, LytX family, LytX truncates, CbpX truncate-LytX truncate chimeric proteins, pneumolysin (Ply), PspA, PsaA, Sp128, Sp101, Sp130, Sp125 and Sp133, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following: (1) a vaccine (II) comprising (I); and (2) making (II) comprising selecting and isolating two different **S. pneumoniae** proteins, and mixing the proteins together with a pharmaceutically acceptable carrier. ACTIVITY - Auditory; antiinflammatory. No biological data is given.

MECHANISM OF ACTION - Immune response elicitor; vaccine (claimed). The immunogenic compositions comprising Streptococcus pneumoniae proteins and vaccines were evaluated in various animal models or with human sera. Animal models were used to evaluate pneumococcal infection. C3H/HeJ mice (6 - 8 weeks old) were immunized with 15 micro g protein adjuvanted with 50 micro 1 Complete Freund's Adjuvant (CFA), followed 3 - 4 weeks later by boosting with 15 micro g protein with Incomplete Freund's Adjuvant (IFA). For demonstrating passive and active protection from systemic infection, mice were administered intraperitoneally with immune sera or proteins prior to challenge by intraperitoneal injection with 15 - 90 LD50 (median lethal dose) pneumococci on week 8 - 10. Additionally, proteins were tested in a mouse nasopharynx colonization model. In addition to mice, infant rats were susceptible to colonization and infection by S. pneumoniae. In passive protective studies, administration of mouse immune sera was done prior to challenge with intranasal administration of S. pneumoniae in 2 - 5 day old infant rat pups. Colonization was determined by plating nasal washes. Favorable interactions between the protein components of the combination vaccine were demonstrated by administering a dose of each protein in the vaccine which would be subprotective in a monovalent vaccine. Increased protective efficacy of the

combination vaccine compared to monovalent vaccines was attributed to a favorable interaction between the components.

USE - (I) is useful for eliciting an immune response in a mammal. A vaccine (II) comprising (I) is useful for preventing or ameliorating Streptococcus infection in a patient over 55 years, in the manufacture of a medicament for the prevention or treatment of pneumonia in patients over 55 years, and for preventing or ameliorating otitis media in infants (claimed).

ADVANTAGE - (I) has advantages over S. pneumoniae polysaccharide vaccines in that multiple S . pneumoniae protein (immunogenic) compositions include greater cross-protection across the numerous serotypes, further inhibit adherence and colony formulation, and potentially raise antibodies that can neutralize the toxic/enzymatic functions of a pathogen. Furthermore, additional surface antigens provide a unit to further stimulate opsonophagocytosis. Dwg.0/6

L8

ANSWER 10 OF 28 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN

ACCESSION NUMBER:

2002-195762 [25] WPIDS

CROSS REFERENCE: DOC. NO. CPI:

1999-540849 [45] C2002-060493

TITLE:

New multiple antigenic peptide for

immunizing against streptococcal infections, binds to

monoclonal antibody obtained in response to immunizing an animal with pneumococcal

surface adhesion protein A or its fragment.

DERWENT CLASS:

B04 D16

INVENTOR(S):

ADES, E W; CARLONE, G M; JOHNSON, S E; JUE, D L;

SAMPSON, J S

PATENT ASSIGNEE(S):

(USSH) US DEPT HEALTH & HUMAN SERVICES

COUNTRY COUNT:

96

PATENT INFORMATION:

| PA! | rent | NO | | | KI | 1D] | DAT! | E | Ī | WEE | K | | LA |] | PG | | | | | | | | |
|-----|------|------|------|--------------|----|------|------|---------------|---------------|------|------------------|----------|----|------------|----|----|----|----|-----|-----|----|----|------|
| wo | 200 | 200 | 449 | 7 | A2 | 20 | 020 | 117 | (2) | 002 | 25) ¹ | * El | | - - | _ | | | * | | | | | |
| | | | | | | | | | | | | | | | GR | ΙE | IT | KE | LS. | IJÜ | MC | MW | -1 |
| | | | | | | | | \mathtt{SL} | | | | | | | | | | | | 1 | | | . •- |
| | W: | AE | ΑG | AL | AM | ΑT | ΑU | ΑZ | BA | ВВ | ВG | BR | BY | ΒZ | CA | СН | CN | СО | CR | CU | CZ | DE | |
| | | | | | | | | | | | | | | | | | | | | | KG | | |
| | | | | | | | | | | | | | | | | | | | | | PL | | |
| | | RO | RU | SD | SE | SG | SI | SK | \mathtt{SL} | ТJ | TM | TR | TT | TZ | UA | ŪG | US | UZ | VN | ΥU | ZA | ZW | |
| AU | 200 | 107 | 193 | 5 | Α | 200 | 020 | L21 | (20 | 0023 | 34) | | | | | | | | | | | | |
| EP | 130 | 1530 | 0 | | A2 | 200 | 0304 | 116 | (20 | 0032 | 28) | Eì | 1 | | | | | | | | | | |
| | R: | AL | ΑT | BE | CH | CY | DE | DK | ES | FI | FR | GB | GR | ΙE | IT | LI | LT | LU | LV | MC | MK | NL | |
| | | | | | SI | | | | | | | | | | | | | | | | | | |
| JP | 200 | 4502 | 2782 | 2 | W | 200 | 040 | L29 | (20 | 004 | L3) | | 1 | L42 | | | | | | | | | |
| US | 690 | 3184 | 4 | | B1 | 200 | 1506 | 507 | 120 | 1053 | 188 | | | | | | | | | | | | |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|----------------|-----------------|----------|
| WO 2002004497 | A2 | WO 2001-US21626 | 20010710 |
| AU 2001071935 | A | AU 2001-71935 | 20010710 |
| EP 1301530 | A2 | EP 2001-950993 | 20010710 |
| | | WO 2001-US21626 | 20010710 |
| JP 2004502782 | W | WO 2001-US21626 | 20010710 |
| | | JP 2002-509360 | 20010710 |
| US 6903184 | B1 Provisional | US 1998-76565P | 19980302 |
| | CIP of | WO 1999-US4326 | 19990226 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO . | | | | |
|--|---|---|--|--|--|--|
| AU 2001071935 EP 1301530 JP 2004502782 | A Based on A2 Based on W Based on | WO 2002004497 WO 2002004497 WO 2002004497 | | | | |
| PRIORITY APPLN. INFO | : US 2000-613092 | 20000710; US | | | | |

1998-76565P

1999-US4326 AN 2002-195762 [25] WPIDS

CR 1999-540849 [45]

AB WO 200204497 A UPAB: 20050616

NOVELTY - A multiple **antigenic** peptide (I) that immunospecifically binds to a monoclonal antibody obtained in response to immunizing an animal with **Streptococcus pneumoniae pneumococcal** surface adhesion protein A (PsaA) or its immunogenic fragment, is new.

19980302; WO

19990226

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for conferring protective immunity against **S. pneumoniae** infection in a subject comprising administering a therapeutic composition containing (I).

ACTIVITY - Antibacterial.

MECHANISM OF ACTION - Vaccine. (I) was tested for protection against challenge with a virulent capsular type 3 S. pneumoniae strain, WU2. Twenty CB A/CaHN/J mice carrying the xid mutation (x-linked immunodeficiency) were anesthetized and bled infraorbitally to obtain pre-immunization sera. A 37 kDa protein (pneumococcal surface adhesion A) was emulsified in complete Freund's adjuvant (CFA) to a protein concentration of 54 micro q/ml. Ten mice were injected subcutaneously into 2 axillary and 2 lingual sites at 0.1 ml/site, delivering approximately 22 micro g protein/mouse. Ten control mice were treated identically with CFA and buffer substituting for protein. Fourteen days later, the 10 test mice were injected intraperitoneally (IP) with 100 micro g of the 37 kDa protein and controls were injected IP with buffer. Eight days following the IP immunizations, all mice were bled infraorbitally to obtain postimmunization sera, and challenged intravenously (IV) with 60 colony forming units (cfu) of a log phase culture of S. pneumoniae strain WU2. Mice were observed for 21 days, and deaths were recorded. Sera were collected prior to immunizations to establish baseline exposures, and also following the full immunization protocol in order to correlate circulating antibody to the 37 kDa protein with protection. Results showed that 10/10 mice immunized with 37 kDa protein survived and 2/10 mice (controls) with no protein survived (8/10

USE - (I) is useful for conferring protective immunity against $\bf S$. pneumoniae infection in a subject (claimed). Dwg.0/4

L8 ANSWER 11.OF 28 MEDLINE on STN

ACCESSION NUMBER: 2002707462 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 12399193

TITLE: Effect of monophosphoryl lipid A (MPL) on T-helper

cells when administered as an adjuvant with

pneumocococcal-CRM197 conjugate vaccine in healthy

toddlers.

AUTHOR: Vernacchio Louis; Bernstein Henry; Pelton Steve; Allen

Carole; MacDonald Kristin; Dunn Jessica; Duncan David D; Tsao Grace; LaPosta Vincent; Eldridge John; Laussucq

Suzanne; Ambrosino Donna M; Molrine Deborah C

CORPORATE SOURCE: Department of Pediatrics, Harvard Medical School,

Boston, MA 02115, USA.. lvernacchio@slone.bu.edu

CONTRACT NUMBER:

5T32HD0748802 (NICHD)

SOURCE:

Vaccine, (2002 Nov 1) Vol. 20, No. 31-32, pp. 3658-67.

Journal code: 8406899. ISSN: 0264-410X.

PUB. COUNTRY: DOCUMENT TYPE:

Netherlands (CLINICAL TRIAL)

Journal; Article; (JOURNAL ARTICLE)

(RANDOMIZED CONTROLLED TRIAL)

LANGUAGE:

English

FILE SEGMENT:

Priority Journals

ENTRY MONTH:

200305

ENTRY DATE:

Entered STN: 17 Dec 2002

Last Updated on STN: 31 May 2003 Entered Medline: 30 May 2003

AB As new vaccines are developed, novel adjuvants may play an important role in eliciting an effective immune response. We evaluated the safety and adjuvant properties of monophosphoryl lipid A (MPL in 129 healthy toddlers immunized with two doses of nine-valent pneumococcal-CRM(197) protein conjugate vaccine (PCV9) combined with 10, 25, or 50 micro g of MPL with or without alum (AlPO(4)). Vaccine-specific humoral and cell-mediated responses were examined following the second dose of study vaccine. All doses of MPL were welltolerated and a dose-dependent effect of MPL on specific cellular responses was observed. The 10 micro g MPL dose significantly enhanced CRM(197)specific T-cell proliferation (P=0.02) and interferon-gamma (INF-gamma) production (P=0.009) compared to responses of controls who received PCV9 with AlPO(4). In contrast, CRM(197)-specific T-cell proliferation and interferongamma production of the 50 micro g MPL/AlPO(4) group were decreased when compared to controls although these differences did not reach statistical significance. IL-5 and IL-13 responses after immunization showed a similar pattern with increased production in the 10 micro g MPL group and decreased production in the 50 micro g MPL/AlPO(4) group compared to controls. There were no differences in serum IgG antibody concentrations to the nine vaccine pneumococcal capsular polysaccharides and carrier protein between the MPLcontaining and control vaccine groups. These findings demonstrate a dosedependent effect of MPL on T-helper cell type 1 (TH-1) responses to the carrier protein and also suggest an effect on T-helper cell type 2 (TH-2) responses.

ANSWER 12 OF 28 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN

ACCESSION NUMBER:

2001-367614 [38] WPIDS

DOC. NO. CPI:

C2001-112781

TITLE:

Immunogenic composition for treating Neisserial bacteria infection, has Neisseria meningitidis antigens from serogroups B, C with further Neisserial proteins and protective antigens

against other pathogenic organisms.

DERWENT CLASS:

B04 D16

INVENTOR(S):

GIULIANI, M M; PIZZA, M; RAPPUOLI, R

PATENT ASSIGNEE(S):

(CHIR) CHIRON SPA; (CHIR-N) CHIRON SPA; (CHIR) CHIRON

SRL; (GIUL-I) GIULIANI M M; (PIZZ-I) PIZZA M;

(RAPP-I) RAPPUOLI R

COUNTRY COUNT:

95

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

WO 2001037863 A2 20010531 (200138)* EN 27

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

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W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK
       DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
       KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO
       RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2001018785
                A 20010604 (200153)
EP 1235589
                A2 20020904 (200266)
                                      EN
    R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL
       PT RO SE SI TR
BR 2000015958
               A 20030225 (200320)
JP 2003514868
                W 20030422 (200336)
                                           43
CN 1433322
                A 20030730 (200365)
MX 2002005322
               A1 20021201 (200377)
                A 20031128 (200382)
NZ 519608
CN 1507916
               A 20040630 (200462)
NZ 529213
               A 20050324 (200523)
              A1 20050407 (200524)
US 2005074450
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APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|----------|-----------------|----------|
| WO 2001037863 | A2 | WO 2000-IB1940 | 20001129 |
| AU 2001018785 | Α | AU 2001-18785 | 20001129 |
| EP 1235589 | A2 | EP 2000-981554 | 20001129 |
| | | WO 2000-IB1940 | 20001129 |
| BR 2000015958 | A | BR 2000-15958 | 20001129 |
| | | WO 2000-IB1940 | 20001129 |
| JP 2003514868 | W | WO 2000-IB1940 | 20001129 |
| | | JP 2001-539477 | 20001129 |
| CN 1433322 | Α | CN 2000-818712 | 20001129 |
| MX 2002005322 | A1 | WO 2000-IB1940 | 20001129 |
| | | MX 2002-5322 | 20020529 |
| NZ 519608 | A | NZ 2000-519608 | 20001129 |
| | | WO 2000-IB1940 | 20001129 |
| CN 1507916 | A Div ex | .CN 2000-818712 | 20001129 |
| | | CN 2003-104674 | 20001129 |
| NZ 529213 | A Div ex | NZ 2000-519608 | 20001129 |
| | | NZ 2000-529213 | 20001129 |
| US 2005074450 | A1 | WO 2000-IB1940 | 20001129 |
| | | US 2003-148533 | 20030310 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|---|--|---|
| AU 2001018785 EP 1235589 BR 2000015958 JP 2003514868 | A Based on A2 Based on A Based on W Based on | WO 2001037863 WO 2001037863 WO 2001037863 WO 2001037863 |
| MX 2002005322 | Al Based on | WO 2001037863 |
| NZ 519608 | A Div in Based on | NZ 529213 WO 2001037863 |
| NZ 529213 | A Div ex | NZ 519608 |

PRIORITY APPLN. INFO: GB 1999-28196

19991129

AN 2001-367614 [38] WPIDS

AB WO 200137863 A UPAB: 20041001

NOVELTY - An immunogenic composition (I) comprising Neisseria meningitidis (Nm) serogroup C oligosaccharide and Nm serogroup B outer membrane protein, in combination with proteins (P1) (or its immunogenic fragments) and/or

protective antigens against Nm serogroups A, W or Y, Hemophilus influenza, Pneumococcus, diphtheria, tetanus, whooping cough, hepatitis B virus and/or Helicobacter pylori, is new.

DETAILED DESCRIPTION - An immunogenic composition (I) comprising Neisseria meningitidis (Nm) serogroup C oligosaccharide and Nm serogroup B outer membrane protein, in combination with proteins (P1) (or its immunogenic fragments) and/or protective antigens against Nm serogroups A, W or Y, Hemophilus influenza, Pneumococcus, diphtheria, tetanus, whooping cough, hepatitis B virus and/or Helicobacter pylori, is new. P1, or its immunogenic fragments, is disclosed in W099/57280, W099/36544, W099/24578, W097/28273, W096/29412, W095/03413 or W099/31132.

INDEPENDENT CLAIMS are also included for the following: (1) an immunogenic composition comprising NmC oligosaccharide and NmB proteins 919, 287 and/or ORF1; and (2) a vaccine comprising (I).

ACTIVITY - Antibiotic.

MECHANISM OF ACTION - Vaccine. Groups of guinea pigs received one of NmC conj./alum, NmB/alum, NmC conj./NmB/alum and NmC conj./NmB/MF59 vaccine components. Each animal received two injections, intramuscularly (IM), separated by 28 days. Serum samples were obtained prior to each injection and 18 days after the second injection. Each dose consisted of two 0.25 ml IM injections. Serum samples were assayed for IgG anticapsular antibody concentrations to NmC and for IgG anti-outer membrane vesicle antibody concentrations to NmB by ELISA. A specific anti-meningococcal B antibody response was induced by the vaccine combinations comprising NmB and a specific anti-meningococcal C antibody response was induced by the vaccine combinations comprising NmC. The antibody response induced by the combination of NmC conjugate and NmB in the presence of MF59 adjuvant was significantly greater than the antibody response induced by either the NmC conjugate alone or the combination of the NmC conjugate and NmB in the presence of alum. When the adjuvant MF59 was present, the antibody titer for the combination vaccine increased approximately 6-fold. Serum samples were also tested for complementmediated bactericidal titers to MenC strain 60E and MenB strain 44/76. The combination vaccine elicited high titers of serum bactericidal antibody for both NmB and NmC. 2-5 fold higher NmB bactericidal titers were obtained with the combination vaccine than with the NmB vaccine alone. The antibodies diffected to meningococcal B and C induced by the vaccine combinations comprising NmB and NmC were bactericidal.

USE - (I) is useful for treating or preventing infection due to Neisserial bacteria.

Dwg.0/2

L8 ANSWER 13 OF 28 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN

ACCESSION NUMBER:

2001-146945 [15] WPIDS

DOC. NO. CPI:

C2001-043397

TITLE:

Oral vaccine compositions comprise protein

antigens encapsulated within alginate

microspheres to induce an immune response against the

protein antigen.

DERWENT CLASS:

A96 B04 D16

88

INVENTOR(S):

JUNG, S Y; KWON, I C; PARK, J A; JEONG, S Y

PATENT ASSIGNEE(S):

(KOAD) KOREA ADV INST SCI & TECHNOLOGY

COUNTRY COUNT:

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

WO 2001000233 A1 20010104 (200115)* EN 64

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ UG ZW



W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW

AU 9955295 A 20010131 (200124)

KR 2001003853 A 20010115 (200147)

KR 2002005563 · A 20020117 (200250)

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE | | |
|---------------|------|----------------|----------|--|--|
| WO 2001000233 | A1 | WO 1999-KR466 | 19990819 | | |
| AU 9955295 | Α | AU 1999-55295 | 19990819 | | |
| KR 2001003853 | Α | KR 1999-24336 | 19990625 | | |
| KR 2002005563 | Α | KR 2001-701096 | 20010126 | | |

FILING DETAILS:

| PATENT NO | KI | ИĎ | | PATENT NO |
|------------|----|-------|----|---------------|
| | | | | |
| AU 9955295 | Α | Based | on | WO 2001000233 |

PRIORITY APPLN. INFO: KR 1999-24336

19990625

2001-146945 [15] WPIDS

AB WO 200100233 A UPAB: 20011026

NOVELTY - A vaccine composition (I) for oral administration consisting essentially of a protein antigen (Ia), to induce an immune response to the antigen, encapsulated in alginate microspheres (Ib), is new.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a process (M1) for preparing (I) which involves: (a) mixing aliquot of (Ia) or, (Ia) and an immune adjuvant with a alginate aqueous solution;

- (b) homogenizing by adding a mixture of the alginate and (Ia) to n-octanol containing an emulsifier; (c) spraying n-octanol solution containing calcium chloride (CaCl2) into the emulsion while stirring the whole emulsion slowly; (d) adding additional CaCl2 solution to saturate the emulsion, and curing microspheres;
- (e) dehydrating microspheres by adding dehydrating solvent; and (f) collecting the microspheres on membrane filters and washing with alcohol, and then drying in vacuo. ACTIVITY - Antibacterial; virucide.

MECHANISM OF ACTION - Vaccine. The biological activity of a vaccine comprising pneumococcal surface protein A(PspA) was tested in mice. Female Balb/c mice, 6 to 8 weeks old were kept under standard specific pathogen free (SPF) conditions and immunized with 40 micro g of PsaA, the emulsion of the antigens dissolved in phosphate buffered saline (PBS) (200 micro 1) and complete Freund's adjuvant. Blood was collected from a puncture of the retroorbital plexuses. Serum was separated from whole blood following coagulation at 4 deg. C for 18 hours by centrifugation. Gut samples were collected. PsaA specific antibody responses at serum, gut wash and lung lavage were assayed by enzyme linked immunsorbent assay (ELISA). At 2 weeks after third immunization, the levels of anti-PsaA antibodies of Immunoglobulin (Ig)G and IgA increased generally.

USE - (I) causes a mucosal immunity response (claimed) against the antigen delivered.

ADVANTAGE - The alginate-encapsulated antigen shows higher level of antigenicity than the naked protein antigen and is considered a proper carrier for an efficient delivery of antigens by the Peyer's patch and by concomitant transport through lymphatics because of having less than 5 micro m diameter. PsaA antigens were suspended in phosphate buffered saline (PBS) with 3% sodium carbonate (Na2CO3) immediately before peroral immunization with 40 micro

g/mouse of encapsulated PsaA (EPsaA) or naked PsaA (NPsaA). At 2 weeks after triple immunizations of mice with N(PsaA) or E(PsaA), PsaA specific antibody responses at serum, gut wash and lung lavage were assayed. The effect of the carrier on the immunogenicity of orally-administered PsaA was investigated by comparing the immune responses of the mice immunized with E(PsaA) and N(PsaA). E(PsaA) induced prominent Immunoglobulin (Ig)G, and IgA responses at serum, bronchoalveolar sites, and intestine among these groups, suggesting that the encapsulated antigen enhance both the systemic and the mucosal antibody responses probably by the protection of antigens against degradation. Dwg.0/14

L8 ANSWER 14 OF 28 MEDLINE on STN DUPLICATE 2

ACCESSION NUMBER: 2000143758 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 10678959

TITLE: CpG oligodeoxynucleotides act as adjuvants for

pneumococcal polysaccharide-protein conjugate

vaccines and enhance antipolysaccharide immunoglobulin

G2a (IgG2a) and IgG3 antibodies.

AUTHOR: Chu R S; McCool T; Greenspan N S; Schreiber J R;

Harding C V

CORPORATE SOURCE: Institute of Pathology, Case Western Reserve

University, Case Western Reserve University, Cleveland,

Ohio 44106, USA.

CONTRACT NUMBER: AI27862 (NIAID)

AI34343 (NIAID) AI35726 (NIAID)

+

SOURCE: Infection and immunity, (2000 Mar) Vol. 68, No. 3, pp.

1450-6.

Journal code: 0246127. ISSN: 0019-9567.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200003

ENTRY DATE: Entered STN: 27 Mar 2000

Last Updated on STN: 27 Mar 2000 Entered Medline: 16 Mar 2000

AB Pneumococcal polysaccharide-protein conjugate vaccines elicit antipolysaccharide antibodies, but multiple doses are required to achieve protective antibody levels in children. In addition, the immunogenicity of experimental multivalent pneumococcal conjugate vaccines varies with different polysaccharide serotypes. One strategy to improve these vaccines is to incorporate an adjuvant to enhance their immunogenicity. Synthetic oligodeoxynucleotides containing unmethylated CpG motifs (CpG ODN) are adjuvants that promote T-cell and T-dependent antibody responses to protein antigens, but it has been unclear whether CpG ODN can enhance polysaccharidespecific antibody responses. The present studies demonstrate significant adjuvant activity of CpG ODN for antibody responses against Streptococcus pneumoniae polysaccharide types 19F and 6B induced by conjugates of 19F and 6B with the protein carrier CRM(197). BALB/c ByJ mice were injected with 19F-CRM(197) or 6B-CRM(197) with or without CpG ODN, and sera were tested for anti-19F or anti-6B antibodies by enzyme-linked immunosorbent assay. The polysaccharide-specific antibody response to 19F-CRM(197) alone was predominantly of the immunoglobulin G1 (IgG1) and IgM isotypes, but addition of CpG ODN markedly increased geometric mean titers of total anti-19F antibody (23-fold), anti-19F IgG2a (26-fold), and anti-19F IgG3 (>246-fold). The polysaccharide-specific antibody response to 6B-CRM(197) alone consisted only of IgM, but addition of CpG ODN induced high titers of anti-6B IgG1 (>78-fold

increase), anti-6B IgG2a (>54-fold increase), and anti-6B IgG3 (>3,162-fold increase). CpG ODN also increased anti-CRM(197) IgG2a and IgG3. Adjuvant effects were not observed with control non-CpG ODN. Thus, CpG ODN significantly enhance antipolysaccharide IgG responses (especially IgG2a and IgG3) induced by these glycoconjugate vaccines.

L8

ANSWER 15 OF 28 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN

ACCESSION NUMBER:

1999-550986 [46] WPIDS

DOC. NO. CPI:

C1999-160690

TITLE:

Inducing an immune response by intranasal administration of pathogen-derived antigen and interleukin-12, particularly for protection

against mucosal pathogens.

DERWENT CLASS:

B04 D16

INVENTOR(S):

ARULANANDAM, B P; METZGER, D W (MEDI-N) MEDICAL COLLEGE OHIO

COUNTRY COUNT:

PATENT INFORMATION:

PATENT ASSIGNEE(S):

| PAT | CENT | ИО | | | KI | ND I | DATI | Ξ | V | VEE | < | | LΑ | . I | ?G | | | | | | | |
|-----|------|------|------|----|----|------|---------------|-----|-----|------|-------|----|--------------------|--------|----|----|----|----|----|----|---------------|-------|
| WO | 9944 | 1635 | 5 | | A1 | 199 | 9909 | 910 | (19 | 9994 | 16) * | EN | 1 - | 69 | - | | | | | | | |
| | RW: | ΑT | ΒE | СН | CY | DE | DK | EA | ES | FI | FR | GB | GH | GM | GR | ΙE | ΙT | KE | LS | LU | MC | MW |
| | | NL | ΟA | PT | SD | SE | \mathtt{SL} | sz | UG | zw | | | | | | | | | | | | |
| | W: | AL | AM | ΑT | ΑU | ΑZ | BA | ВВ | BG | BR | BY | CA | CH | CN | CU | CZ | DE | DK | EE | ES | FI | GB |
| | | GD | GE | GH | GM | HR | HU | ΙD | ΙL | IN | IS | JP | ΚE | KG | ΚP | KR | ΚZ | LC | LK | LR | LS | LT |
| | | LU | r | MD | MG | MK | MN | MW | MX | ИО | ΝZ | PL | PT | RO | RU | SD | SE | SG | SI | sk | \mathtt{SL} | ТJ |
| | | TM | TR | TT | UA | UG | US | UZ | VN | YU | ZW | | | | | | | | | | | • |
| AU | 9929 | 9808 | 3 | | Α | 199 | 909 | 920 | (20 | 0000 |)7) | | | | | | | | | | | |
| ΕP | 1058 | 3557 | 7 | | A1 | 200 | 012 | 213 | (20 | 0006 | 66) | EN | 1 | | | | | | | | | |
| | R: | ΑT | BE | CH | CY | DE | DK | ES | FI | FR | GB | GR | ΙE | ΙT | LΙ | LU | MC | NL | PT | SE | | |
| CN | 1298 | 3307 | 7 | | Α | 200 | 106 | 506 | (20 | 015 | 57) | | | | | | | | | | | |
| JΡ | 2002 | 2505 | 302 | 2 | W | 200 | 202 | 219 | (20 | 0021 | L6) | | | 75 | | | | | | | | • |
| AU | 7479 | 917 | | | В | 200 | 205 | 530 | (20 | 024 | 17) | | | | | | | | | | | , , . |
| NZ | 5066 | 550 | | | A٠ | 200 | 311 | 128 | (20 | 0038 | 32) | | | | | | | | | | | |
| ΑU | 2002 | 2300 | 0830 |) | Αï | 200 | 302 | 220 | (20 | 042 | 27)# | ŧ | | | | | | | | | | • |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|-----------|----------------|----------|
| WO 9944635 | A1 | WO 1999-US4678 | 19990304 |
| AU 9929808 | A | AU 1999-29808 | 19990304 |
| EP 1058557 | A1 | EP 1999-911081 | 19990304 |
| | | WO 1999-US4678 | 19990304 |
| CN 1298307 | A | CN 1999-803679 | 19990304 |
| JP 2002505302 | W | WO 1999-US4678 | 19990304 |
| | | JP 2000-534236 | 19990304 |
| AU 747917 | В . | AU 1999-29808 | 19990304 |
| NZ 506650 | A | NZ 1999-506650 | 19990304 |
| | | WO 1999-US4678 | 19990304 |
| AU 2002300830 | Al Div ex | AU 1999-29808 | 19990304 |
| | | AU 2002-300830 | 20020830 |

FILING DETAILS:

| PATENT NO | ΚI | ND | | I | PATENT NO |
|------------|----|-------|----|----|-----------|
| | | | | | - |
| AU 9929808 | Α | Based | on | WO | 9944635 |

EP 1058557 Al Based on WO 9944635
JP 2002505302 W Based on WO 9944635
AU 747917 B Previous Publ. AU 9929808
Based on WO 9944635
NZ 506650 A Based on WO 9944635

PRIORITY APPLN. INFO: US 1998-35188 19980305; AU

2002-300830 20020830

AN 1999-550986 [46] WPIDS

AB WO 9944635 A UPAB: 19991110

NOVELTY - An immune response to a pathogen is induced, or enhanced, by intranasal administration of interleukin-12 (IL-12) and an **antigen** (Ag) from the pathogen.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for induction of a Th1-like immune response to a pathogen by intranasal administration of Ag and IL-12.

ACTIVITY - Antibacterial; antiviral; antiparasitic; antifungal; immunostimulant.

MECHANISM OF ACTION - IL-12 redirects the mucosal component of the immune system towards Th1-type cytokine and antibody profiles, and modifies cytokine/antibody expression in distant systemic compartments. Mice were immunized on day 0 with 0.1 mg dinitrophenyl-ovalbumin conjugate (DNP-OVA) and 10 mu g cholera toxin B-subunit, and on days 0, 1, 2 and 3 with 1 mu g recombinant murine IL-12. The animals were boosted with conjugate on days 14 and 28, and were given another dose of IL-12 on day 28. All treatments were intranasal. Compared with animals immunized without IL-12, the treated animals showed significantly higher levels of mRNA for interferon gamma (both in spleen and lung) and for IL-10 (in spleen only), while expression of mRNA for IL-5 (associated with a Th2-type response) was reduced or suppressed. Treatment wiht IL-12 also caused increased levels of:

- (a) immunoglobulin (Ig) G2a anti-OVA antibodies in bronchoalveolar washing, and
- (b) IgG2a, 2b and 3 anti-DNP responses in the **serum**, also a temporary reduction in IgG1 levels. Fecal levels of IgG2a were also increased but those of IgA were decreased.

USE - The method is used to immunize against mucosal pathogens, especially (myco) bacteria, viruses, parasites and fungi, for prevention and treatment of infection. Mice were immunized intranasally with a H1N1 influenza subunit vaccine on day 0, and with 1 mu g recombinant murine IL-12 on days 0, 1, 2 and 3. After 4-5 weeks, the animals were challenged with infectious influenza virus A/PR8/34, at a dose designed to give about 50% kill in animals given the vaccine without IL-12. All animals that received IL-12 survived, with significant reduction in morbidity as assessed by weight loss, compared with those given vaccine only.

ADVANTAGE - When administered intranasally, IL-12 acts as adjuvant, increasing Ag-specific mucosal and systemic responses, specifically Th1-type cytokine response (increased expression of interferon gamma) and humoral response (increased levels of IgG2a, 2b and 3). Intranasal administration has the same effect as parenteral administration but is non-invasive and safer Dwg.0/14

L8 ANSWER 16 OF 28 JICST-EPlus COPYRIGHT 2006 JST on STN

ACCESSION NUMBER: 1000

1000407541 JICST-EPlus Full-text

TITLE:

Substances of helminthes reacting with C reactive

protein in human serum.

AUTHOR:

OIKAWA YOSABURO; IKEDA TERUAKI

CORPORATE SOURCE:

Kanazawa Med. Univ.

SOURCE:

Ohara Sogo Byoin Nenpo, (1999) vol. 42, pp. 5-9. Journal Code: Y0686A (Fig. 2, Tbl. 3, Ref. 10)

ISSN: 0285-3671

PUB. COUNTRY:

Japan

DOCUMENT TYPE:

Journal; Article

LANGUAGE:

Japanese

STATUS:

New

AB. C reactive protein (CRP) is an acute phase serum protein that reacts with the phosphoryl-choline of pneumococcal somatic C polysaccharide and some polycations like a protamine in the sperm cells, etc. In Ochterlony's test for helminthic diseases, a nonspecific precipitin is produced between the serum with high-level of CRP and the parasite antigens. Araki (1983) discussed that the precipitation would be produced by the reaction between the serum CRP and the parasite antigens. We demonstrated this reaction experimentally and proved that the precipitin was produced at the cases of the sera with over 3+ CRPlevels against the antigens of some nematodes. The sera with over 4+ CRPlevels produced precipitin with not only the nematode- but also the cestodeand the trematode-antigens. In electrophoretic study, CRP-reactive parasiteantigens moved to both anodic and cathodic sides in the antigens of Ascaris suum, but those did not move from the additional point in Fasciola sp. antigens. In immunohistochemical study using the worm sections of some helminthes, serum-CRP reacted strongly with the testes of Toxocara canis. From these results, the protamine-like substance may be existing also in the testes of nematode. (author abst.)

L8 ANSWER 17 OF 28 SCISEARCH COPYRIGHT (c) 2006 The Thomson Corporation

on STN

ACCESSION NUMBER:

1998:253556 SCISEARCH Full-text

THE GENUINE ARTICLE: ZD630

TITLE:

Enhanced protective antibody responses to PspA after

intranasal or subcutaneous injections of PspA genetically fused to granulocyte-macrophage colony-stimulating factor or interleukin-2 Wortham C; Grinberg L; Kaslow D C; Briles D E;

AUTHOR:

McDaniel L S; Lees A; Flora M; Snapper C M; Mond J J

(Reprint)

CORPORATE SOURCE:

Uniformed Serv Univ Hlth Sci, Dept Med, 4301 Jones Bridge Rd, Bethesda, MD 20814 USA (Reprint); Uniformed Serv Univ Hlth Sci, Dept Med, Bethesda, MD 20814 USA; Uniformed Serv Univ Hlth Sci, Dept Pathol, Bethesda, MD 20814 USA; Uniformed Serv Univ Hlth Sci, Biomed Instrumentat Ctr, Bethesda, MD 20814 USA; NIAID, Parasit Dis Lab, NIH, Bethesda, MD 20892 USA; Univ Alabama, Dept Microbiol, Birmingham, AL 35294 USA; Univ Mississippi, Med Ctr, Dept Surg, Jackson, MS 39216 USA; Univ Mississippi, Med Ctr, Dept Microbiol, Jackson, MS 39216 USA

COUNTRY OF AUTHOR:

USA

SOURCE:

INFECTION AND IMMUNITY, (APR 1998) Vol. 66, No. 4, pp.

1513-1520.

ISSN: 0019-9567.

PUBLISHER:

AMER SOC MICROBIOLOGY, 1752 N ST NW, WASHINGTON, DC

20036-2904 USA.

DOCUMENT TYPE:

Article; Journal

LANGUAGE:

English

REFERENCE COUNT:

34

ENTRY DATE:

Entered STN: 1998

Last Updated on STN: 1998

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB Antibody to **pneumococcal** surface protein A (PspA) has been shown to be protective for **Streptococcus pneumoniae** infections in mice. In an attempt to define a model for inducing protective antibody to PspA in

the absence of adjuvant, we designed two genetic fusions, PspAinterleukin-2 [IL-2]) and PspA-granulocyte-macrophage colony-stimulating factor (GM-CSF). These constructs maintained high cytokine function in vitro, as tested by their activity on IL-2 or GM-CSP-dependent cell lines. While intranasal immunization with PspA induced no detectable anti-PspA response, both PspA-IL-2 and PspA-GM-CSF stimulated high immunoglobulin G1 (IgG1) antibody responses, Interestingly, only the PspA-IL-2, not the PspA-GM-CSF, construct stimulated IgG2a antibody responses, suggesting that this construct directed the response along a TH1-dependent pathway. Comparable enhancement of the anti-PspA response with similar isotype profiles was observed after subcutaneous immunization as well. The enhancement observed with PspA-IL-2 was dependent on IL-2 activity in that it was not seen in IL-2 receptor knockout mice, while PspA in alum induced high-titer antibody in these mice, The antibody was tested for its protective activity in a mouse lethality model using S. pneumoniae WU-R2. Passive transfer of 1:90 dilutions of sera from mice immunized with PspA-IL-2 and PspA-GM-CSF elicited protection of CBA/N mice against intravenous challenge with over 170 50% lethal doses of capsular type 3 strain WU2, Only 0.17 mu g or less of IgG antibody to PspA was able to provide passive protection against otherwise fatal challenge with S. pneumoniae. The data demonstrate that designing protein-cytokine fusions may be a useful approach for mucosal immunization and can induce high-titer systemic protective antibody responses.

L8 ANSWER 18 OF 28 MEDLINE on STN

ACCESSION NUMBER: 95179012 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 7874029

DOCUMENT NOMBER: FUDMED ID: 7074029

TITLE: Production and immunochemical characterization of

Neisseria meningitidis group B antiserum for the

diagnosis of purulent meningitis.

AUTHOR: Alkmin M G; Shimizu S H; Landgraf I M; Gaspari E N;

Melles C E

CORPORATE SOURCE: Secoes de Imunologia, Instituto Adolfo Lutz, SP.

Brasil.

SOURCE: Brazilian journal of medical and biological research =

Revista brasileira de pesquisas medicas e biologicas / Sociedade Brasileira de Biofisica ... [et al.], (1994

Jul) Vol. 27, No. 7, pp. 1627-34.

Journal code: 8112917. ISSN: 0100-879X.

PUB. COUNTRY: Brazil

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199504

ENTRY DATE: Entered STN: 19 Apr 1995

Last Updated on STN: 19 Apr 1995

Entered Medline: 6 Apr 1995

Unlike Neisseria meningitidis groups A, C, Y and W135, the group B capsular polysaccharide has been shown to be chemically and immunologically identical to the capsular polysaccharide of Escherichia coli K1. Both components are sialic acid homopolymers and are poorly immunogenic. Nevertheless, due to the high incidence of Neisseria meningitidis group B meningitis in the population of the State of Sao Paulo, preparing antiserum to this serogroup for diagnostic purposes has become a matter of high priority. Of the many immunization schemes proposed, intravenous inoculation of whole bacteria previously inactivated with formaldehyde and simultaneous intradermal inoculation with a mixture of the bacterial polysaccharide fraction and whole bacteria in complete Freund;s adjuvant have produced the best results. The

antiserum was treated with immunoadsorbents prepared with aluminum chloride and protein and/or polysaccharide antigens from each of the following heterologous bacteria: Haemophilus influenzae type b, Streptococcus pneumoniae, Escherichia coli other than K1, and Staphylococcus aureus, in order to eliminate cross-reactivity. For quality control analysis, the antiserum was assessed by the immunodiffusion, counterimmunoelectrophoresis, dot-ELISA, and immuno-blot techniques against homologous antigens. Specificity was obtained after treating the antiserum with Haemophilus influenzae type b polysaccharide immunosorbent.

L8 ANSWER 19 OF 28 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights

reserved on STN

ACCESSION NUMBER: 94369200 EMBASE Full-text

DOCUMENT NUMBER: 1994369200

TITLE: Towards a preventive HIV vaccine - Lessons from

history.

AUTHOR: Tramont E.C.

CORPORATE SOURCE: Medical Biotechnology Center, Maryland Univ.

Biotechnology Inst., 618 West Lombard St., Baltimore, MD

21201, United States

SOURCE: AIDS Research and Human Retroviruses, (1994) Vol. 10,

No. SUPPL. 2, pp. S181-S185. . ISSN: 0889-2229 CODEN: ARHRE7

COUNTRY: United States

DOCUMENT TYPE: Journal; Conference Article

FILE SEGMENT: 004 Microbiology

026 Immunology, Serology and Transplantation

037 Drug Literature Index

LANGUAGE: English

ENTRY DATE: Entered STN: 12 Jan 1995

Last Updated on STN: 12 Jan 1995

DATA NOT AVAILABLE FOR THIS ACCESSION NUMBER

L8 ANSWER 20 OF 28 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation

on STN

ACCESSION NUMBER: 1993:523290 BIOSIS Full-text

DOCUMENT NUMBER: PREV199396136697

TITLE: Efficacy of Pasteurella haemolytica subunit

antigens in a goat model of pasteurellosis.

AUTHOR(S): Purdy, Charles W. [Reprint author]; Straus, David C.;

Struck, Douglas; Foster, Gene S. [Reprint author]

CORPORATE SOURCE: USDA, Agric. Res. Serv., Conserv. Prod. Res. Lab.,

Bushland, TX 79012, USA

SOURCE: American Journal of Veterinary Research, (1993) Vol.

54, No. 10, pp. 1637-1647.

CODEN: AJVRAH. ISSN: 0002-9645.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 19 Nov 1993

Last Updated on STN: 19 Nov 1993

AB The effectiveness of Pasteurella haemolytica biovar A, serovar 1 (Ph1) subunit vaccines was tested in goats, using challenge exposure by transthoracic injection. Twenty-two weanling male Spanish goats were randomly allotted to 4 groups. Six goats were given 2 transthoracic injections into the lung 18 days apart with live Ph1 impregnated in agar beads (positive controls). Six goats were not given injections (negative controls). Five goats were given 2 transthoracic injections into the lung 18 days apart with 4.6 mg of cytotoxin in agar beads. The remaining 5 goats were given 2 IM injections, 18 days apart, into the thigh with 4.6 mg of cytotoxin emulsified in incomplete

Freunds' adjuvant. Twenty-four days after the second injection, all goats were challenge-exposed to live Ph1 by transthoracic injection into the lung, and 4 days later, all goats were euthanatized and necropsied. Serum neutralizing anticytotoxin titer was measured throughout the experiment. Mean volume of consolidated lung tissue was 0.38 cm-3 for the positive control group, 32 cm-3 for the negative control group; 19 cm-3 for the cytotoxin-lung group; and 88 cm-3 for the cytotoxin-adjuvant-IM group. Only the positive control group was protected from Ph1 challenge exposure. The Ph1 cytotoxin subunit vaccine alone appeared to be ineffective, and the anticytotoxin titer was not correlated with protection. In a separate trial, 32 weanling male Spanish goats were randomly allotted to 5 groups. Each was given 2 transthoracic injections into the lung 22 days apart. Six goats were given Ph1 cytotoxin impregnated into agar beads; 6 were given Ph1 lipopolysaccharide impregnated in agar beads; 6 were given Ph1 capsule impregnated in agar-beads. Six goats were given agar beads only (negative controls), and 6 were given live Ph1 impregnated into agar beads (positive controls). Twenty days after the second injection, all goats were challenge-exposed to live Ph1 by transthoracic injection into the lung, and 4 days later, all goats were euthanatized and necropsied. Mean volume of consolidated lung tissue was 0.14 cm-3 for the positive control group, 7.59 cm-3 for the negative control group, 11.21 cm-3 for the cytotoxin group, 10.19 cm-3 for the lipopolysaccharide group, and 1.6 cm-3 for the capsule group. Again, only injection of live Ph1 (positive controls) induced solid protection; however, the capsule subunit vaccine induced partial protection against challenge exposure in this trial. Lipopolysaccharide and cytotoxin subunit vaccines were ineffective in protecting goats against challenge exposure with live Ph1.

L8 ANSWER 21 OF 28 SCISEARCH COPYRIGHT (c) 2006 The Thomson Corporation

on STN

ACCESSION NUMBER: 1991:433465 SCISEARCH Full-text

THE GENUINE ARTICLE: FY331

TITLE:

IMMUNOGENICITY OF STREPTOCOCCUS-

PNEUMONIAE TYPE-14 CAPSULAR POLYSACCHARIDE - INFLUENCE OF CARRIERS AND ADJUVANTS ON ISOTYPE

DISTRIBUTION

AUTHOR:

VANDEWIJGERT J H H M (Reprint); VERHEUL A F M; SNIPPE

H; CHECK I J; HUNTER R L

CORPORATE SOURCE:

STATE UNIV UTRECHT, EIJKMAN WINKLER LAB MED MICROBIOL, UTRECHT, NETHERLANDS; EMORY UNIV, DEPT PATHOL & LAB

MED, ATLANTA, GA 30322

COUNTRY OF AUTHOR:

NETHERLANDS; USA

SOURCE:

INFECTION AND IMMUNITY, (AUG 1991) Vol. 59, No. 8, pp.

2750-2757.

ISSN: 0019-9567.

PUBLISHER:

AMER SOC MICROBIOLOGY, 1752 N ST NW, WASHINGTON, DC

20036-2904 USA.

DOCUMENT TYPE:

Article; Journal

LANGUAGE:

AB

English

REFERENCE COUNT:

39

ENTRY DATE:

Entered STN: 1994

Last Updated on STN: 1994

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

This project investigated the effects of novel carriers and adjuvants on the isotype of murine immunoglobulin G (IgG) antibody to pneumococcal capsular polysaccharide type 14 (S14PS). S14PS conjugated to bovine serum albumin induced a weak antibody response which was 100% IgG1 following injection without adjuvant. The same polysaccharide conjugated to flagella of Salmonella typhi induced an antibody response which was 88% IgG3. S14PS-bovine serum albumin was injected with block copolymer

L121 or Quil A in squalane-in-water emulsions. The copolymer L121 was at least as effective as Quil A or complete Freund adjuvant in inducing IgG antibodies. IgG1 was the dominant subclass for all. Addition of monophosphoryl lipid A, but not the threonyl derivative of muramyl dipeptide or nontoxic Rhodopseudomonas sphaeroides lipopolysaccharide, to copolymer L121 increased production of the IgG2a, IgG2b, and IgG3 subclasses. S14PS-flagella with copolymer L121 induced higher titers with a markedly altered isotype distribution: 13% IgG1, 52% IgG2a, 6% IgG2b, and 29% IgG3. Monophosphoryl lipid A added to L121 reduced IgG1 antibody to 5%, but increased IgG2a antibody to 14%, IgG2b antibody to 3%, and IgG3 antibody to 78%. These studies demonstrate that both the carrier and the adjuvant can influence the titer and isotype distribution of antipolysaccharide antibody responses.

L8 ANSWER 22 OF 28 MEDLINE on STN DUPLICATE 3

ACCESSION NUMBER: 86125688 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 3937392

TITLE: [Detection of noncapsular antigens in

pneumococcus].

Vyiavlenie nepasul'nykh antigenov

pnevmokokka.

AUTHOR: Padiukov L n; Tarasova N L

SOURCE: Zhurnal mikrobiologii, epidemiologii, i immunobiologii,

(1985 Nov) No. 11, pp. 43-6.

Journal code: 0415217. ISSN: 0372-9311.

PUB. COUNTRY: USSR

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: Russian

FILE SEGMENT: Priority Journals

ENTRY MONTH: 198603

ENTRY DATE: Entered STN: 21 Mar 1990

Last Updated on STN: 21 Mar 1990

Entered Medline: 7 Mar 1986

AB Complex antigenic preparations obtained from noncapsular pneumococcal strains were used for the immunization of rabbits and guinea pigs. The injection of the preparations in complete freund's adjuvant for 5 weeks led to the appearance of antibodies in their sera. The antibodies were detected by the double immunodiffusion test. The preparations obtained from different strains by extraction (with Triton X-100 or sodium deoxycholate) or by disintegration contain common pneumococcal antigens.

L8 ANSWER 23 OF 28 MEDLINE on STN DUPLICATE 4

ACCESSION NUMBER: 85034567 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 6208403

TITLE: Antibody to epiglycanin and radioimmunoassay to detect

epiglycanin-related glycoproteins in body fluids of

cancer patients.

AUTHOR: Codington J F; Bhavanandan V P; Bloch K J; Nikrui N;

Ellard J V; Wang P S; Jeanloz R W

CONTRACT NUMBER: CA-08418 (NCI)

CA-17686 (NCI) CA-18600 (NCI)

SOURCE: Journal of the National Cancer Institute, (1984 Nov)

Vol. 73, No. 5, pp. 1029-38.

Journal code: 7503089. ISSN: 0027-8874.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT:

Priority Journals

ENTRY MONTH:

198412

ENTRY DATE:

Entered STN: 20 Mar 1990

Last Updated on STN: 3 Feb 1997 Entered Medline: 19 Dec 1984

AB By means of a radioimmunoassay, which utilized [1251]-epiglycanin and antiepiglycanin antiserum induced in rabbits by injections of viable TA3-Ha ascites cells with Freund's complete adjuvant, picogram quantities of epiglycanin could be detected. Anti-epiglycanin antiserum was similarly produced in allogeneic mice. Unlabeled epiglycanin lost the capacity to compete with [125I]epiglycanin in the radioimmunoassay as a result of periodate oxidation or incubation with endo-alpha-N-acetyl-Dgalactosaminidase (Diplococcus pneumoniae), an enzyme found to cleave only the disaccharide beta-D-galactopyranosyl- (1---3)-2-acetamido-2-deoxy-D-galactose chain from serine or threonine residues in epiglycanin. Glycosylhydrolases known to cleave alpha-D-mannose, beta-D-galactose (1,4-linked), beta-N-acetyl-D- glucosamine, and alpha-N-acetyl-D-galactosamine did not reduce the activity of epiglycanin. Neuraminidase enhanced the activity twofold to fivefold. The finding that little or no activity was demonstrated by the disaccharide, the reduced disaccharide, or other glycoproteins containing the same disaccharide chain suggested that the antigenic determinant probably involved the disaccharide and a unique amino acid sequence at the site of its attachment. By means of the radioimmunoassay epiglycanin cross-reactive antigens were detected in the peritoneal or pleural fluid and in the sera of patients with metastatic cancer. Lower concentrations of epiglycanin-like antigen(s) were found in the peritoneal fluid of patients with hepatitis or liver cirrhosis but not in normal serum.

L8 ANSWER 24 OF 28 MEDLINE on STN DUPLICATE 5

ACCESSION NUMBER:

82075265 M

MEDLINE Full-text

DOCUMENT NUMBER:

PubMed ID: 6796542

TITLE:

Effects of prostaglandin synthesis inhibition on the

immune response.

AUTHOR:

Schleimer R P; Benjamini E

SOURCE:

Immunopharmacology, (1981 Sep) Vol. 3, No. 3, pp. ...

205-19.

Journal code: 7902474. ISSN: 0162-3109.

PUB. COUNTRY:

United States

DOCUMENT TYPE:

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE:

English

FILE SEGMENT:

Priority Journals

ENTRY MONTH:

198202

ENTRY DATE:

Entered STN: 16 Mar 1990

Last Updated on STN: 16 Mar 1990 Entered Medline: 12 Feb 1982

Inhibition of prostaglandin synthesis at the time of antigen presentation was used to test the role of prostaglandins in the inductive stage of the in vivo immune response to several antigens. Indomethacin and Ro 20-5720, two prostaglandin synthesis inhibitors, produced a several-fold enhancement of the primary immunoglobulin (Ig) M and IgG anti-sheep red blood cell plaque-forming cell (PFC) response in CAF1 mice. Indomethacin and Ro 20-5720 also enhanced the antibody response to chicken serum albumin (CSA) in buffered saline. However, the antibody response to CSA in Freund's adjuvant was reduced by indomethacin treatment. Indomethacin treatment enhanced the PFC response to a chicken lysozyme-lipopolysaccharide conjugate, and did not greatly affect the PFC response to pneumococcal polysaccharide. The allogeneic cytotoxic response to the El-4 tumor line was delayed by indomethacin treatment and, since this tumor does not synthesize prostaglandins, we speculate that prostaglandin synthesis by the host is important in the generation of a

cytotoxic response to this tumor. It is concluded that the role of prostaglandins in the induction of the immune response varies, and can be proinductive or anti-inductive, depending on the eliciting antigen.

L8 ANSWER 25 OF 28 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights

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ACCESSION NUMBER: 78238400 EMBASE Full-text

DOCUMENT NUMBER: 1978238400

TITLE: Radioimmunoassay for tubulin detection.

AUTHOR: Le Guern C.; Pradelles P.; Dray F.; et al.

CORPORATE SOURCE: Lab. Immunochim. Analyt., Inst. Pasteur, Paris, France

SOURCE: FEBS Letters, (1977) Vol. 84, No. 1, pp. 97-100. .

COUNTRY: Netherlands

DOCUMENT TYPE: Journal

FILE SEGMENT: 029 Clinical Biochemistry

023 Nuclear Medicine

026 Immunology, Serology and Transplantation

LANGUAGE: English

Tubulin was prepared from mouse brain and purified by chromatography on phosphocellulose (M.D. Weingarten et al., 1975). Rabbits were immunized with 3 monthly injections of 25 μg purified tubulin emulsified in Freund's adjuvant. Iodinated tubulin was prepared by the chloramine T method using Na125I. For the assay, iodinated tubulin is mixed with the sample under investigation, diluted anti-serum and a specific rabbit anti- Pneumococcus antibody (used as carrier during the antigen-antibody precipitation). After 18 hr incubation at 4°C goat rabbit globulin antiserum is added followed by an additional incubation of 5 hr at 4°C. The tubes are centrifuged, the supernatants discarded and the radioactivity of the pellets determined with a gamma-counter. The method permits measurement of quantities as low as 50 pg tubulin. Specifity of the assay has been tested by determinations of tubulin in crude mouse brain extracts, in which tubulin represents about 10% of the total proteins, and in various fractions obtained by chromatography. The method is about 5000-fold more sensitive than that recently described by I. ~ 2000 Gozes et al. (FEBS-Letters 73, 109, 1977) and may be particularly convenient to the study of tubulin synthesis in cultures of primary neurons where very small amounts of material are available.

L8 ANSWER 26 OF 28 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights

reserved on STN

ACCESSION NUMBER: 77028955 EMBASE Full-text

DOCUMENT NUMBER: 1977028955

TITLE: Suppressor T cells and host resistance to type III

pneumoccocus after treatment with antilymphocyte

serum.

AUTHOR: Barth R.F.; Singla O.; Liu C.

CORPORATE SOURCE: Dept. Pathol. Oncol., Univ. Kansas Med. Cent., Kansas

City, Kans. 66103, United States

SOURCE: Infection and Immunity, (1975) Vol. 12, No. 6, pp.

1307-1312. . CODEN: INFIBR

DOCUMENT TYPE: · Journal

FILE SEGMENT: 037 Drug Literature Index

026 Immunology, Serology and Transplantation

LANGUAGE: English

AB The antibody response to type III pneumococcal polysaccharide (SSS III) was significantly increased in mice treated with antilymphocyte serum (ALS).

BALB/c mice given 0.25 ml of ALS on days -1, 0, and 1 relative to the days of

immunization with 0.5 μg of SSS III had a 20 fold increment (11,383 increased to 199,917) in the number of splenic plaque forming cells enumerated on day 5 compared with untreated, immunized controls. This effect has been attributed to the elimination of a subpopulation of thymus derived lymphocytes (T cells) that has suppressor function. The present series of experiments relate the augmented antibody response to SSS III in mice treated with ALS to increased host resistance after infection with Streptococcus pnéumoniae, type III (Pn. III). The 50% lethal dose of Pn III in nonimmunized mice was 102 and the 100% lethal dose was 103 organisms. Mice immunized with 0.5 μg of SSS III and challenged 5 days later with Pn III were completely protected against a dose of up to 108 organisms. Mice treated with 0.25 ml of ALS on days -1, 0, and 1, immunized with SSS III on day 0, and challenged with 2.5 \times 109 Pn III on day 5 had a mean survival time of >100 h compared with 16 h for immunized non serum treated controls. Animals given a single injection of ALS before immunization showed no increase in resistance, whereas mice treated after immunization had significant prolongation of survival times. Untreated, immunized mice challenged with 5 x 109, 1 x 109, or 5 x 108 Pn III survived 14 to 19 h, whereas ALS treated animals had mean survival times of 48, 174, and 222 h, respectively. These findings suggest that immunoregulatory T cells may have a biologically significant effect in a narrow zone in which the normal host immune response is insufficient but still potentially capable of providing some additional degree of protection if suppressor cells are eliminated.

L8 ANSWER 27 OF 28 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights

reserved on STN

ACCESSION NUMBER: 75181578 EMBASE Full-text

DOCUMENT NUMBER: 1975181578

TITLE: Heterogeneity of the BALB/c antiphosphorylcholine

antibody response at the precursor cell level.

AUTHOR: Gearhart P.J.; Sigal N.H.; Klinman N.R.

CORPORATE SOURCE: Dept. Pathol., Univ. Pennsylvania Sch. Med.,

Philadelphia, Pa. 19174, United States

SOURCE: Journal of Experimental Medicine, (1975) Vol. 141, No.

1, pp. 56-71. . CODEN: JEMEAV

DOCUMENT TYPE: Journal

FILE SEGMENT: 005 General Pathology and Pathological Anatomy

026 Immunology, Serology and Transplantation

037 Drug Literature Index

LANGUAGE: English

Immune responsiveness to phosphorylcholine (PC) in BALB/c mice was characterized by combining (a) usage of highly sensitive radioimmunoassays for quantitation of antibody, heavy chain class, and idiotype on a weight basis; (b) isolation of PC specific B cells in fragment cultures; and (c) stimulation in a carrier primed environment with the PC hapten coupled to carrier through a tripeptide spacer in order to maximize carrier recognition. The specificity and accuracy of the radioimmunoassays were verified by specific inhibition, lack of nonspecific binding, and excellent concordance of values for monoclonal antibody concentration obtained independently for Fab and idiotype content. The latter evidence also serves as strong confirmation of the monoclonality of in vitro monofocal responses as well as the preservation of the idiotype on antibodies of differing immunoglobulin classes. The results indicate that while B cells expressing the TEPC 15 plasmacytoma idiotype predominate, other idiotypes may be represented by 2-50% of PC specific precursors, and monoclonal antibodies even of the TEPC 15 idiotype are produced in both the IgM and IgG1 immunoglobulin classes. These findings are confirmed by the analysis of serum antibodies produced in carrier primed mice immunized with hapten coupled through a tripeptide spacer, thus reemphasizing

the enhancement of primary responsiveness, particularly IgG1 production, by maximizing carrier recognition. The finding of idiotype diversity in the PC response, as well as diversity of expression in terms of quantity and immunoglobulin class of antibody synthesized by the clonal progeny of B cells within the TEPC 15 clonotype emphasize the heterogeneity of the B cell population both in terms of the specificity repertoire and the physiological state of cells even within a single clonotype.

L8 ANSWER 28 OF 28 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation

on STN

ACCESSION NUMBER:

1974:185849 BIOSIS Full-text

DOCUMENT NUMBER:

PREV197458015543; BA58:15543

TITLE:

THE EFFECT OF TRANSPLANTED METHYL CHOLANTHRENE INDUCED FIBRO SARCOMATA AND CORYNEBACTERIUM-PARVUM ON THE

IMMUNE RESPONSE OF CBA TO A-HEJ MICE TO THYMUS DEPENDENT AND INDEPENDENT ANTIGENS.

AUTHOR(S):

JAMES K; GHAFFAR A; MILNE I

SOURCE:

British Journal of Cancer, (1974) Vol. 29, No. 1, pp.

11-20.

CODEN: BJCAAI. ISSN: 0007-0920.

DOCUMENT TYPE:

Article

FILE SEGMENT:

BA

LANGUAGE:

Unavailable

(FILE 'HCAPLUS' ENTERED AT 14:53:02 ON 10 OCT 2006)

L9 1123 SEA FILE=HCAPLUS ABB=ON PLU=ON (STREPTOCOCCUS PNEUMONIAE

AND VACCINES)/CT

325 SEA FILE=HCAPLUS ABB=ON PLU=ON L9 AND ANTIGENS/CT L10

11 SEA FILE=HCAPLUS ABB=ON PLU=ON L10 AND (ANTISERUMS OR L11

BLOOD SERUM) / CT

L12 9 L11 NOT L6

L12 ANSWER 1 OF 9 HCAPLUS COPYRIGHT 2006 ACS on STN

Entered STN: 04 Jan 2006

ACCESSION NUMBER:

2006:6418 HCAPLUS Full-text

DOCUMENT NUMBER:

144:86563

TITLE:

Carbohydrate-phosphorylcholine conjugate molecules for vaccine and drug screening as well as for treatment and diagnosis of bacterial infection of

respiratory tract

INVENTOR(S):

Taha, Muhamed-Kheir; Huteau, Valerie; Nato,

Farida; Leduc, Mireille; Lafaye, Pierre; Alonso,

Jean-Michel; England, Patrick; Bay, Sylvie

PATENT ASSIGNEE(S):

SOURCE:

Institut Pasteur, Fr.

Can. Pat. Appl., 35 pp.

CODEN: CPXXEB

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

| PATENT NO. | KIND D | DATE | APPLICATION NO. | DATE | | |
|----------------|---------|-------------|---------------------|----------|--|--|
| CA 2472818 | AA 2 | 20051230 | CA 2004-2472818 | 20040630 | | |
| CA 2511084 | | | CA 2005-2511084 | 20050629 | | |
| WO 2006003518 | A2 2 | 20060112 | WO 2005-IB2316 | 20050630 | | |
| W: AE, AG, AL, | AM, AT, | AU, AZ, BA, | BB, BG, BR, BW, BY, | BZ, CA, | | |
| CH, CN, CO, | CR, CU, | CZ, DE, DK, | DM, DZ, EC, EE, EG, | ES, FI, | | |

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GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM,
            KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN,
            MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU,
             SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA,
            UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU,
             IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF,
            BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG,
            BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
            AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
PRIORITY APPLN. INFO.:
                                            CA 2004-2472818
                                                                A 20040630
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OTHER SOURCE(S):

MARPAT 144:86563

The present invention relates to hapten containing carbohydratephosphorylcholine conjugate mol., and more particularly, relates to synthetic phosphorylcholine-N-acetyl-D-galactosamine mols. and their use for treating and/or preventing bacterial infection of respiratory tract. Furthermore, the present invention is concerned with compns., vaccines and methods for providing an immune response and/or a protective immunity to animals against a bacterial infection of respiratory tract and methods and test kits for the diagnosis of bacterial infection of respiratory tract and screening of an active mol. interacting with a phosphorylcholine mol.

ANSWER 2 OF 9 HCAPLUS COPYRIGHT 2006 ACS on STN

Entered STN: 14 Feb 2003

ACCESSION NUMBER: 2003:117857 HCAPLUS Full-text

DOCUMENT NUMBER: 138:168811

TITLE: Identification of opsonic antigens expressed by

pathogenic microbes during infection for use as vaccines and to generate therapeutic antibodies

INVENTOR(S): Foster, Simon; Mond, James; Clarke, Simon;

McDowell, Philip; Brummel, Kirsty

PATENT ASSIGNEE(S): University of Sheffield, UK; Biosynexus

Incorporated

SOURCE: PCT Int. Appl., 189 pp.

CODEN: PIXXD2

Patent

DOCUMENT TYPE:

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

| PA | CENT | NO. | | | KIN | D - | DATE | | | APPL | ICAT | ION I | NO. | | | ATE |
|----|--|-----|-----|-----|-----|--------|------|------|------|------|------|-------|-----|-----|-----|---------|
| | 2003011899 A2 20030213 2003011899 A3 20040226 | | | | | | | WO 2 | 002- | GB36 | 06 | | | | | |
| WO | | | | | | | | | | | | | | | | |
| | W: | | | | | | ΑU, | | | | | | | | | |
| | | CN, | co, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | ĒE; | ES, | FI, | GB, | GD, |
| | | GE, | GH, | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KP, | KR, | KZ, |
| | | LC, | LK, | LR, | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, |
| | | NO, | NZ, | OM, | PH, | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | TJ, |
| | | TM, | TN, | TR, | TT, | TZ, | UA, | UG, | US, | UZ, | VN, | YU, | ZA, | ZM, | ZW | |
| | RW: | GH, | GM, | KE, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, | AZ, |
| | | BY, | KG, | ΚZ, | MD, | RU, | ТJ, | TM, | ΑT, | BE, | BG, | CH, | CY, | CZ, | DΕ, | DK, |
| | | | | | | | GR, | | | | | | | | | |
| | | BF, | ВJ, | | | | | | | | | | | | | TD, TG |
| CA | 2453 | 937 | | | AA | | 2003 | 0213 | (| CA 2 | 002- | 2453 | 937 | | 20 | 0020802 |
| | 2002 | | | | | | | | | | | | | | | 0020802 |
| EP | 1412 | 379 | | | A2 | | 2004 | 0428 | : | EP 2 | 002- | 7513 | 80 | | 20 | 0020802 |
| | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, |

PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK JP 2004536885 T2 20041209 JP 2003-517090 20020802 US 2005256299 A1 20051117 US 2004-485517 20040916 PRIORITY APPLN. INFO.: GB 2001-18825 A 20010802 20020109 GB 2002-349 WO 2002-GB3606 W 20020802

AB The invention relates to a method, i.e. SEREX or serol. identification of antigens by recombinant expression cloning, for the identification of antigenic polypeptides, typically opsonic antigens, expressed by pathogenic microbes. The identified antigens are useful as vaccines, and for generating therapeutic and/or diagnostic antibodies. Thus, partial gene sequences and encoded proteins (e.g. Hex A and 29 kDa peptides) of Staphylococcus aureus and S. epidermidis were identified by the disclosed method.

L12 ANSWER 3 OF 9 HCAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 14 Jun 2002

ACCESSION NUMBER: 2002:450339 HCAPLUS Full-text

DOCUMENT NUMBER: 137:28294

TITLE: LL-37 is an immunostimulant

INVENTOR(S): Chertov, Oleg; Oppenheim, Joost J.; Yang, De;

Anderson, Glenn M.; Wooters, Joseph M.

1.82

PATENT ASSIGNEE(S):

USA

SOURCE: U.S. Pat. Appl. Publ., 12 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE | |
|--|----------|----------------------|---|------------------------------------|-----|
| US 2002072495 US 2004013679 PRIORITY APPLN. INFO.: | A1 A1 | 20020613 20040122 | US 2001-960876 US 2000-619715 US 2000-233983P | 20010921 20030714 P 20000921 | بعد |
| | | | US 2001-960876 | B1 20010921 | |

AB The invention provides a method of enhancing an immune response in a subject, comprising administering an effective amount of LL-37. Moreover, the invention provides a method of enhancing in a subject an immune response to a vaccine, comprising administering to the subject an effective amount of LL-37 with a vaccine. Further provided is a method of detecting a compound that decreases an immune response in a subject. A method of treating an autoimmune disease in a subject is thus provided. Also provided is a vaccine comprising an immunogen and LL-37.

L12 ANSWER 4 OF 9 HCAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 22 Dec 2000

ACCESSION NUMBER: 2000:900909 HCAPLUS Full-text

DOCUMENT NUMBER: 134:55496

TITLE: Methods and compositions for opsonophagocytic

assays

INVENTOR(S): Martinez, Joseph E.; Carlone, George M.; Hickey,

Michael H.

PATENT ASSIGNEE(S): The Government of the United States of America,

Represented by the Secretary, Department of Health and Human Services, USA; Flow Applications, Inc.

PCT Int. Appl., 51 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

SOURCE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE ____ ----------WO 2000077518 WO 2000-US15858 A2 20001221 20000609 WO 2000077518 Α3 20020530 WO 2000077518 C2 20020829 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG CA 2274207 AΑ 20001211 CA 1999-2274207 19990611 · AU 2000054768 **A5** 20010102 AU 2000-54768 20000609 AU 768051 B2 20031127 EP 1226440 A2 20020731 EP 2000-939724 20000609 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL EP 1672366 A2 20060621 EP 2006-6172 20000609 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY US 6815172 В1 20041109 US 2001-9660 20011207 PRIORITY APPLN. INFO.: US 1999-138911P Ρ 19990611 EP 2000-939724 A3 20000609 WO 2000-US15858 20000609

Methods and compns. comprising immunoassays for the detection of functional AB antibodies and the anal. of vaccine efficacy are described. In particular, the present invention provides opsonophagocytic assays. The assays are useful for the rapid and simultaneous detection of multiple different functional antibodies. In preferred embodiments, the assays include fluorescent labels of multiple colors and/or intensities.

ANSWER 5 OF 9 HCAPLUS COPYRIGHT 2006 ACS on STN

Entered STN: 22 Dec 2000

2000:900481 HCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 134:55489

TITLE: Streptococcus pneumoniae proteins and vaccines

INVENTOR(S): Adamou, John E.; Choi, Gil H.

PATENT ASSIGNEE(S): MedImmune, Inc., USA

PCT Int. Appl., 54 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

| | | | | | | | | APPLICATION NO. | | | | | | | | | | | |
|------|----------------------------|--|---|--|--|--|--|--|--|---|---|---|--|--|--|---|--|---|---|
| | | 00076540 A2 20 | | | 2000 | | | | | | | | | | | | | | |
| WO | 2000 | 0765 | 40 | | A3 | | 2001 | 0208 | | | | | | | | | | | |
| | W: | AL, | AM, | AT, | ΑU, | ΑZ, | BA, | BB, | BG, | BF | ₹, E | ΒY, | CA, | CH, | CN, | CF | ₹, | CU, | |
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| | | IS, | JP, | ΚE, | KG, | KP, | KR, | ΚZ, | LC, | LK | ۲, I | LR, | LS, | LT, | LU, | LV | 7, | MA, | |
| | | MD, | MG, | MK, | MN, | MW, | MX, | NO, | NZ, | ΡI | , E | PT, | RO, | RU, | SD, | SE | Ξ, | SG, | |
| | | SI, | SK, | SL, | TJ, | TM, | TR, | TT, | TZ, | UA | λ, τ | JG, | UZ, | VN, | YU, | \mathbf{z}_{I} | ١, | ZW | |
| | RW: | GH, | GM, | ΚE, | LS, | MW, | MZ, | SD, | SL, | SZ | , I | ΓZ, | UG, | ZW, | AT, | BE | Ξ, | CH, | |
| | | CY, | DE, | DK, | ES, | FI, | FR, | GB, | GR, | ΙE | Ξ, Ι | ΙΤ, | LU, | MC, | NL, | PΊ | ٠, | SE, | |
| | | | | | | | | | | | | | | | | | | | |
| CA | 2371 | 714 | | | AA | | 2000 | 1221 | | CA | 200 | 00-2 | 2371 | 714 | | | 20 | 0006 | 09 |
| | | | | | | | | | | EΡ | 200 | 00-9 | 397 | 39 | | | 20 | 0006 | 09 |
| ΕP | | | | | | | | | | | | | | | | | | | |
| | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR | ₹, I | Т, | LI, | LU, | NL, | SE | Ι, | MC, | |
| | | PT, | ΙE, | SI, | LT, | LV, | FI, | RO, | CY | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | | 20 | 0006 | 09 |
| US | 6887 | 480 | | | B1 | | 2005 | 0503 | 1 | US | 200 | 00-5 | 59099 | 91 | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| US | 2002 | 11056 | 62 | | A 1 | | 2002 | 0815 | 1 | US | 200 |)2- (| 5738 | 5 | | | 20 | 0202 | 05 |
| RITY | APP | LN. | INFO | . : | | | | | . 1 | US | 199 | 9-1 | 13845 | 53P | | P | 19 | 9906 | 10 |
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| | | | | | | | | | 1 | US | 200 | 00-5 | 9099 | 91 | | А3 | 20 | 0006 | 09 |
| | | | | | | | | | Ţ | ωO | 200 | 1-00 | IS159 | 925 | | w | 20 | በበበፍ | 09 |
| | WO WO CA EP EP AU US AT US | WO 2000 WO 2000 W: RW: CA 2371 EP 1185 EP 1185 R: JP 2003 AU 7778 US 6887 AT 3256 US 2002 | WO 20000765 WO 20000765 W: AL, CZ, IS, MD, SI, RW: GH, CY, BF, CA 2371714 EP 1185297 EP 1185297 EP 1185297 R: AT, PT, JP 20035011 AU 777856 US 6887480 AT 325620 US 200211056 | WO 2000076540 WO 2000076540 W: AL, AM, CZ, DE, IS, JP, MD, MG, SI, SK, RW: GH, GM, CY, DE, BF, BJ, CA 2371714 EP 1185297 EP 1185297 EP 1185297 R: AT, BE, PT, IE, JP 2003501110 AU 777856 US 6887480 AT 325620 US 2002110562 | WO 2000076540 WO 2000076540 W: AL, AM, AT, CZ, DE, DK, IS, JP, KE, MD, MG, MK, SI, SK, SL, RW: GH, GM, KE, CY, DE, DK, BF, BJ, CF, CA 2371714 EP 1185297 EP 1185297 EP 1185297 R: AT, BE, CH, PT, IE, SI, JP 2003501110 AU 777856 US 6887480 AT 325620 US 2002110562 | WO 2000076540 A2 WO 2000076540 A3 W: AL, AM, AT, AU, CZ, DE, DK, DM, IS, JP, KE, KG, MD, MG, MK, MN, SI, SK, SL, TJ, RW: GH, GM, KE, LS, CY, DE, DK, ES, BF, BJ, CF, CG, CA 2371714 AA EP 1185297 A2 EP 1185297 B1 R: AT, BE, CH, DE, PT, IE, SI, LT, JP 2003501110 T2 AU 777856 B2 US 6887480 B1 AT 325620 E US 2002110562 A1 | WO 2000076540 A2 WO 2000076540 A3 W: AL, AM, AT, AU, AZ, CZ, DE, DK, DM, EE, IS, JP, KE, KG, KP, MD, MG, MK, MN, MW, SI, SK, SL, TJ, TM, RW: GH, GM, KE, LS, MW, CY, DE, DK, ES, FI, BF, BJ, CF, CG, CI, CA 2371714 AA EP 1185297 B1 R: AT, BE, CH, DE, DK, PT, IE, SI, LT, LV, JP 2003501110 T2 AU 777856 B2 US 6887480 B1 AT 325620 E US 2002110562 A1 | WO 2000076540 A2 2000 WO 2000076540 A3 2001 W: AL, AM, AT, AU, AZ, BA, CZ, DE, DK, DM, EE, ES, IS, JP, KE, KG, KP, KR, MD, MG, MK, MN, MW, MX, SI, SK, SL, TJ, TM, TR, RW: GH, GM, KE, LS, MW, MZ, CY, DE, DK, ES, FI, FR, BF, BJ, CF, CG, CI, CM, CA 2371714 AA 2000 R: AT, BE, CH, DE, DK, ES, PT, IE, SI, LT, LV, FI, JP 2003501110 T2 2003 AU 777856 B2 2004 US 2002110562 A1 2002 | WO 2000076540 A2 20001221 WO 2000076540 A3 20010208 W: AL, AM, AT, AU, AZ, BA, BB, CZ, DE, DK, DM, EE, ES, FI, IS, JP, KE, KG, KP, KR, KZ, MD, MG, MK, MN, MW, MX, NO, SI, SK, SL, TJ, TM, TR, TT, RW: GH, GM, KE, LS, MW, MZ, SD, CY, DE, DK, ES, FI, FR, GB, BF, BJ, CF, CG, CI, CM, GA, CA 2371714 AA 20001221 EP 1185297 A2 20020313 EP 1185297 B1 20060510 R: AT, BE, CH, DE, DK, ES, FR, PT, IE, SI, LT, LV, FI, RO, JP 2003501110 T2 20030114 AU 777856 B2 20041104 US 6887480 B1 20050503 AT 325620 E 20060615 US 2002110562 A1 20020815 | WO 2000076540 W: AL, AM, AT, AU, AZ, BA, BB, BG, CZ, DE, DK, DM, EE, ES, FI, GB, IS, JP, KE, KG, KP, KR, KZ, LC, MD, MG, MK, MN, MW, MX, NO, NZ, SI, SK, SL, TJ, TM, TR, TT, TZ, RW: GH, GM, KE, LS, MW, MZ, SD, SL, CY, DE, DK, ES, FI, FR, GB, GR, BF, BJ, CF, CG, CI, CM, GA, GN, CA 2371714 EP 1185297 R: AT, BE, CH, DE, DK, ES, FR, GB, PT, IE, SI, LT, LV, FI, RO, CY JP 2003501110 AU 777856 B2 20041104 US 6887480 B1 20050503 AT 325620 E 20060615 US 2002110562 RITY APPLN. INFO.: | WO 2000076540 WO 2000076540 WI: AL, AM, AT, AU, AZ, BA, BB, BG, BF, CZ, DE, DK, DM, EE, ES, FI, GB, GI, IS, JP, KE, KG, KP, KR, KZ, LC, LF, MD, MG, MK, MN, MW, MX, NO, NZ, PI, SI, SK, SL, TJ, TM, TR, TT, TZ, UF, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, CY, DE, DK, ES, FI, FR, GB, GR, IE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, CA 2371714 AA 20001221 CA EP 1185297 B1 20060510 R: AT, BE, CH, DE, DK, ES, FR, GB, GF, PT, IE, SI, LT, LV, FI, RO, CY JP 2003501110 T2 20030114 JP AU 777856 B2 20041104 AU 777856 B2 20060615 AT US 2002110562 A1 20020815 US RITY APPLN. INFO.: | WO 2000076540 WO 2000076540 WI: AL, AM, AT, AU, AZ, BA, BB, BG, BR, II CZ, DE, DK, DM, EE, ES, FI, GB, GD, O IS, JP, KE, KG, KP, KR, KZ, LC, LK, II MD, MG, MK, MN, MW, MX, NO, NZ, PL, II SI, SK, SL, TJ, TM, TR, TT, TZ, UA, II RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, II CY, DE, DK, ES, FI, FR, GB, GR, IE, II BF, BJ, CF, CG, CI, CM, GA, GN, GW, M CA 2371714 AA 20001221 CA 200 EP 1185297 B1 20060510 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, II PT, IE, SI, LT, LV, FI, RO, CY JP 2003501110 T2 20030114 JP 20030114 AU 777856 B2 20041104 AU 200 AU 777856 B1 20050503 US 200 AT 325620 E 20060615 AT 200 CRITY APPLN. INFO.: US 200 | WO 2000076540 WO 2000076540 W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, CA 2371714 AA 20001221 CA 2000-2 EP 1185297 B1 20020313 EP 2000-5 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, PT, IE, SI, LT, LV, FI, RO, CY JP 2003501110 T2 20030114 AU 777856 B2 20041104 AU 2000-5 AT 325620 E 20060615 AT 2000-5 RITY APPLN. INFO.: US 2000-5 | WO 2000076540 W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, CA 2371714 AA 20001221 CA 2000-2371 EP 1185297 B1 20060510 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, PT, IE, SI, LT, LV, FI, RO, CY JP 2003501110 T2 20030114 AU 777856 B2 20041104 AU 2000-54778 US 6887480 B1 20050503 US 2000-59098 AT 325620 E 20060615 AT 2000-59098 | WO 2000076540 W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, CA 2371714 EP 1185297 EP 1185297 ER: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, PT, IE, SI, LT, LV, FI, RO, CY JP 2003501110 T2 20031110 T2 20031110 T2 20030114 JP 2001-502873 AU 777856 B2 20041104 AU 2000-54778 US 6887480 B1 20050503 US 2000-590991 AT 325620 E 20060615 AT 2000-590991 AT 325620 E 20060615 AT 2000-590991 | WO 2000076540 W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HU, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, CA 2371714 EP 1185297 EP 1185297 EP 1185297 ER: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, PT, IE, SI, LT, LV, FI, RO, CY JP 2003501110 T2 20030114 AU 2000-54778 US 6887480 B1 20050503 US 2000-590991 AT 325620 E 20060615 AT 2002-590991 US 2000-590991 | WO 2000076540 W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CF, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HU, II IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LN, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZF, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TE, CA 2371714 EP 1185297 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI, RO, CY JP 2003501110 T2 20030114 AU 2000-590991 AT 325620 E 20060615 AT 2000-590991 A3 AU 2000-590991 | WO 2000076540 W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HU, ID, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, CA 2371714 AA 20001221 CA 2000-2371714 AA 20001221 CA 2000-2371714 AA 20001221 CA 2000-2371714 PT, IE, SI, LT, LV, FI, RO, CY JP 2003501110 T2 20030114 AU 2000-590991 AU 777856 B2 20041104 AU 2000-590991 AU 2002-67385 CRITY APPLN. INFO.: US 2000-590991 A3 20 | WO 2000076540 W1 AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG CA 2371714 AA 20001221 CA 2000-2371714 AA 20001221 CA 2000-2371714 AA 20001221 CA 2000-2371714 AA 20001221 CA 2000-939739 200006 EP 1185297 B1 20060510 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY JP 2003501110 T2 20030114 JP 2001-502873 200006 AU 777856 B2 20041104 AU 2000-54778 200006 AT 325620 E 20060615 AT 2000-939739 200006 AT 325620 A1 20020815 US 2002-67385 2000006 |

AΒ The present invention relates to novel immunogenic polypeptides, and fragments thereof, and vaccines for the prevention and treatment of pneumococcal infection, especially by Streptococcus pneumoniae. The invention also relates to antibodies against the disclosed polypeptides, as well as vaccines containing said polypeptides and methods of disease prevention.

112 ANSWER 6 OF 9 HCAPLUS COPYRIGHT 2006 ACS on STN

Entered STN: 26 Sep 1999

ACCESSION NUMBER: 1999:613706 HCAPLUS Full-text

DOCUMENT NUMBER: 131:227663

TITLE:

Double mutant enterotoxin for use as an adjuvant INVENTOR(S): Clements, John D.

PATENT ASSIGNEE(S): The Administrators of the Tulane Educational Fund,

USA

SOURCE: PCT Int. Appl., 46 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

| PA' | rent | NO. | | | KIN | D | DATE | | 2 | APPL | ICAT: | ION I | NO. | | D | ATE | |
|-----|------|-----|-----|-----|-------------|-----|------|-----|------|-------|-------|-----------------------------|-----|----------|-----|-----|--|
| WO | 9947 | 167 | | | A1 19990923 | | | 1 | WO 1 | 999-1 | us56: | - - 23 | | 19990317 | | | |
| | W: | ΑE, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BY, | CA, | CH, | CN, | CU, | |
| | | CZ, | DE, | DK, | EE, | ES, | FI, | GB, | GD, | GΕ, | GH, | GM, | HR, | HU, | ID, | IL, | |
| | | IN, | IS, | JP, | ΚE, | KG, | KP, | KR, | ΚZ, | LC, | LK, | LR, | LS, | LT, | LU, | LV, | |
| | | MD, | MG, | MK, | MN, | MW, | ΜX, | NO, | NZ, | PL, | PT., | RO, | RU, | SD, | SE, | SG, | |
| | | SI, | SK, | SL, | ΤJ, | TM, | TR, | TT, | UA, | UG, | UZ, | VN, | YU, | ZA, | ZW, | AM, | |
| | | | | | | | RU. | | | | | • | | | | • | |

RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,

CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 6033673 A 20000307 US 1998-44064 19980318 AU 9930893 A1 19991011 AU 1999-30893 19990317 PRIORITY APPLN. INFO.: US 1998-44064 A 19980318

WO 1999-US5623 W 19990317

The present invention is directed towards a novel composition which is a genetically distinct mutant of E. coli heat-labile enterotoxin (LT). Specifically, the mutant LT designated LT(R192G/L211A) is modified by two amino acid substitutions, i.e., the arginine at amino acid position 192 is replaced by glycine and the leucine at amino acid position 211 is replaced by alanine. The invention relates to compns. and methods for use of the novel double mutant of LT as an adjuvant. Vaccines comprising LT(R192G/L211A) and bacterial, fungal, protozoal, viral, helmenthal and other microbial pathogenic antigens are claimed.

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 7 OF 9 HCAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 09 Sep 1999

ACCESSÍON NUMBER: 1999:571730 HCAPLUS Full-text

DOCUMENT NUMBER: 131:213099

TITLE: Vaccine for Moraxella catarrhalis

INVENTOR(S): Murphy, Timothy F.

PATENT ASSIGNEE(S): The Research Foundation of State University of New

York, USA

SOURCE: U.S., 20 pp., Cont.-in-part of U.S. 5,607,846.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|-------------|
| | | | | |
| US 5948412 · | Α | 19990907 | US 1997-810655 | 19970303 |
| US 5607846 | Α | 19970304 | US 1994-245758 | 19940517 |
| CA 2189971 | AA | 19951123 | CA 1995-2189971 | 19950420 |
| CA 2189971 | С | 20030729 | | |
| ES 2202361 | Т3 | 20040401 | ES 1995-917165 | 19950420 |
| PRIORITY APPLN. INFO.: | | | US 1994-245758 | A2 19940517 |

AB Compns. comprising outer membrane protein E, and peptides and oligopeptides thereof, of Moraxella catarrhalis are described. Addnl., nucleotide sequences encoding the protein, peptide, or oligopeptide are disclosed, as well as recombinant vectors containing these sequences. Protein, peptide, or oligopeptide can be produced from host cell systems containing these recombinant vectors. Peptides and oligopeptides can also be chemical synthesized. Disclosed are the uses of the protein, peptides and oligopeptides as antigens in antigenic formulations for vaccine applications or for generating antisera of diagnostic or therapeutic use; and as antigens in diagnostic immunoassays. The nucleotide sequences are useful for constructing vectors for use as vaccines for insertions into attenuated bacteria in constructing a recombinant bacterial vaccine and for inserting into a viral vector in constructing a recombinant viral vaccine. Also described is the use of nucleotide sequences related to the gene encoding E as

primers and/or probes in mol. diagnostic assays for the detection of ${\tt M.}$ catarrhalis.

REFERENCE COUNT:

3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 8 OF 9 HCAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 26 Feb 1997

ACCESSION NUMBER: 1997:1280

1997:128048 HCAPLUS Full-text

DOCUMENT NUMBER:

126:211022

TITLE:

Vaccines for nontypeable Haemophilus influenzae

INVENTOR(S):

Green, Bruce A.; Zlotnick, Gary W.

PATENT ASSIGNEE(S):

Praxis Biologics, Inc., USA

SOURCE:

U.S., 24 pp., Cont.-in-part of U.S. Ser. No. 320,

" 4" *:*

971, abandoned. CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------------|----------|------------------------|-------------|
| US 5601831 | A | 19970211 | US 1990-491466 | 19900309 |
| CA 2047681 | AA | 19900910 | CA 1990-2047681 | 19900309 |
| CA 2047681 | С | 20000201 | | |
| EP 606921 | A 1 | 19940720 | EP 1994-100492 | 19900309 |
| EP 606921 | B1 | 20000802 | · | |
| R: AT, BE, CH, | DE, DK | ES, FR, | GB, IT, LI, LU, NL, SE | |
| ES 2063965 | Т3 | 19950116 | ES 1990-905112 | 19900309 |
| AT 195076 | E | 20000815 | AT 1994-100492 | 19900309 |
| US 5780601 | Α | 19980714 | US 1995-447653 | 19950523 |
| US 5955580 | Α | 19990921 | US 1995-449406 | 19950523 |
| US 6420134 | В1 | 20020716 | US 1995-448097 | 19950523 |
| PRIORITY APPLN. INFO.: | | · | US 1989-320971 | B2 19890309 |
| | • | | EP 1990-905112 | A3 19900309 |
| | | | US 1990-491466 | A3 19900309 |

AB Protein "e" of H. influenzae, a lipoprotein of approx. 28,000 daltons, has been purified and sequenced. Protein "e" and peptides or proteins having a shared epitope, can be used to vaccinate against non-typable (and typable) H. influenzae and to prevent otitis media caused by H. influenzae. For this purpose, protein "e" or derivs. thereof can be produced in native, synthetic or recombinant forms and can be administered alone or in conjunction with other antigens of H. influenzae. Protein "e" can also be used in multivalent vaccines designed for H. influenzae and one or more other infectious organisms. Protein "e" was isolated from Haemophilus cell envelopes and characterized, polyclonal anti-protein "e" antiserum and monoclonal anti-protein "e" antibodies were prepared, protein "e" gene was isolated and nucleotide sequence was determined and mol. cloning of the gene was performed, bactericidal activity of vaccine comprising protein "e" subunit was studied, and synergy of anti-protein "e" with other antibodies were demonstrated.

L12 ANSWER 9 OF 9 HCAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 12 May 1984

ACCESSION NUMBER: 1979:99616 HCAPLUS Full-text

DOCUMENT NUMBER: 90:99616

TITLE: WHO expert committee on biological standardization

CORPORATE SOURCE: World Health Organization Expert Committee on

Biological Standardization, Geneva, Switz.

SOURCE:

World Health Organization Technical Report Series

(1978), 626, 147 pp.

CODEN: WHOTAC; ISSN: 0512-3054

DOCUMENT TYPE:

Journal

LANGUAGE: English

Information is provided on standardization procedures for use with antibiotics, antibodies, antigens, blood products and related substances, and hormones and related substances. Information on the requirements for the collection, processing, and quality control of blood products, vaccines, antivenoms, etc. and guidelines for the preparation and establishment of reference materials and reference reagents for biol. substances are presented.

(FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO' ENTERED AT 14:54:16 ON 10 OCT 2006)

L13 0 S L11

FILE 'MEDLINE' ENTERED AT 14:54:30 ON 10 OCT 2006

FILE LAST UPDATED: 7 Oct 2006 (20061007/UP). FILE COVERS 1950 TO DATE.

On December 11, 2005, the 2006 MeSH terms were loaded.

The MEDLINE reload for 2006 is now (26 Feb.) available. For details on the 2006 reload, enter HELP RLOAD at an arrow prompt (=>). See also:

http://www.nlm.nih.gov/mesh/

http://www.nlm.nih.gov/pubs/techbull/nd04/nd04 mesh.html

http://www.nlm.nih.gov/pubs/techbull/nd05/nd05 med data changes.html

http://www.nlm.nih.gov/pubs/techbull/nd05/nd05 2006 MeSH.html

OLDMEDLINE is covered back to 1950.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2006 vocabulary.

This file contains CAS Registry Numbers for easy and accurate substance identification.

862 SEA FILE=MEDLINE ABB=ON PLU=ON (STREPTOCOCCUS PNEUMONIAE L14

AND (VACCINES OR VACCINATION OR IMMUNIZATION))/CT

L15 15 SEA FILE=MEDLINE ABB=ON PLU=ON L14 AND ANTIGENS/CT

L15 ANSWER 1 OF 15 MEDLINE on STN

ACCESSION NUMBER: 2006070757 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 16414272

AUTHOR:

Mucosal vaccine delivery of antigens tightly bound to TITLE:

an adjuvant particle made from food-grade bacteria. van Roosmalen Maarten L; Kanninga Rolf; El Khattabi Mohamed; Neef Jolanda; Audouy Sandrine; Bosma Tjibbe;

Kuipers Anneke; Post Eduard; Steen Anton; Kok Jan; Buist Girbe; Kuipers Oscar P; Robillard George;

Leenhouts Kees

CORPORATE SOURCE: BiOMaDe Technology Foundation, Nijenborgh 4, 9747 AG

Groningen, The Netherlands.

Methods (San Diego, Calif.), (2006 Feb) Vol. 38, No. 2, SOURCE:

pp. 144-9.

Journal code: 9426302. ISSN: 1046-2023.

PUB. COUNTRY:

United States

DOCUMENT TYPE:

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE:

English

FILE SEGMENT:

Priority Journals

ENTRY MONTH:

200604

ENTRY DATE:

Entered STN: 4 Feb 2006

Last Updated on STN: 11 Apr 2006 Entered Medline: 10 Apr 2006

ED Entered STN: 4 Feb 2006

Last Updated on STN: 11 Apr 2006 Entered Medline: 10 Apr 2006

Mucosal immunization with subunit vaccines requires new types of antigen AB delivery vehicles and adjuvants for optimal immune responses. We have developed a non-living and non-genetically modified gram-positive bacterial delivery particle (GEM) that has built-in adjuvant activity and a high loading capacity for externally added heterologous antigens that are fused to a high affinity binding domain. This binding domain, the protein anchor (PA), is derived from the Lactococcus lactis AcmA cell-wall hydrolase, and contains three repeats of a LysM-type cell-wall binding motif. Antigens are produced as antigen-PA fusions by recombinant expression systems that secrete the hybrid proteins into the culture growth medium. GEM particles are then used as affinity beads to isolate the antigen-PA fusions from the complex growth media in a one step procedure after removal of the recombinant producer cells. This procedure is also highly suitable for making multivalent vaccines. resulting vaccines are stable at room temperature, lack recombinant DNA, and mimic pathogens by their bacterial size, surface display of antigens and adjuvant activity of the bacterial components in the GEM particles. The GEMbased vaccines do not require additional adjuvant for eliciting high levels of specific antibodies in mucosal and systemic compartments.

L15 ANSWER 2 OF 15 MEDLINE on STN

ACCESSION NUMBER:

88213591 MEDLINE Full-text

DOCUMENT NUMBER:

PubMed ID: 2966810

TITLE:

Abnormal antibody responses in patients with persistent

generalized lymphadenopathy.

AUTHOR:

Ochs H D; Junker A K; Collier A C; Virant F S;

Handsfield H H; Wedgwood R J

CORPORATE SOURCE:

Department of Pediatrics, School of Medicine,

University of Washington, Seattle 98195.

CONTRACT NUMBER:

AI-07073 (NIAID) AI-12192 (NIAID) AI-18649 (NIAID)

+

SOURCE:

Journal of clinical immunology, (1988 Jan) Vol. 8, No.

1, pp. 57-63.

Journal code: 8102137. ISSN: 0271-9142.

PUB. COUNTRY: DOCUMENT TYPE:

United States (CASE REPORTS)

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE:

English

FILE SEGMENT:

Priority Journals; AIDS

ENTRY MONTH:

198806

ENTRY DATE:

Entered STN: 8 Mar 1990

Last Updated on STN: 3 Feb 1997 Entered Medline: 16 Jun 1988

ED Entered STN: 8 Mar 1990

Last Updated on STN: 3 Feb 1997

Entered Medline: 16 Jun 1988

AB Persistent, generalized lymphadenopathy (PGL) is a recognized component of human immunodeficiency virus (HIV) infection. We conducted longitudinal studies of B and T cell function in seven homosexual men with HIV infection and PGL. All seven had abnormal antibody-mediated immunity as studied by sequential assessment of in vivo antibody responses after immunization with the T-dependent neoantigens bacteriophage phi X 174 and keyhole limpet hemocyanin (KLH), the T-independent tetradecavalent pneumococcal polysaccharide vaccine, and the recall antigens diphtheria and tetanus toxoid. Compared to HIV-negative heterosexual controls, PGL patients responded with lower antibody titers and, following immunization with phage, failed to develop immunologic memory and to switch from IgM- to IgG-isotype antibody. In vitro antigen-induced antibody production was markedly diminished; and some patients showed depressed mitogen responses. There was a correlation between the degree of compromised immunity and the clinical condition; those with the most severe symptoms showed the most extensive immune deficiency. Yet despite obvious immunologic impairment five of the seven men have remained clinically stable over a 3-year follow-up period.

L15 ANSWER 3 OF 15 MEDLINE on STN

ACCESSION NUMBER: 85190843 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 3991719

TITLE: Idiotypes as internal antigens.
AUTHOR: Kohler H; McNamara M; Ward R E

SOURCE: Progress in clinical and biological research, (1985)

Vol. 172B, pp. 343-53.

Journal code: 7605701. ISSN: 0361-7742.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 198506

ENTRY DATE: Entered STN: 20 Mar 1990

Last Updated on STN: 20 Mar 1990 Entered Medline: 17 Jun 1985

ED Entered STN: 20 Mar 1990

Last Updated on STN: 20 Mar 1990 Entered Medline: 17 Jun 1985

L15 ANSWER 4 OF 15 MEDLINE on STN

ACCESSION NUMBER: 84226735 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 6203266

TITLE: [Diagnostic pneumococcal sera and the serological

typing of Streptococcus pneumoniae].

Diagnosticheskie penvmokokkovye syvorotki i

serologicheskoe tipirovanie Streptococcus pneumoniae.

AUTHOR: Raginskaia V P; Baturo A P; Lifshits M B

SOURCE: Zhurnal mikrobiologii, epidemiologii, i immunobiologii,

(1984 Mar) No. 3, pp. 44-6.

Journal code: 0415217. ISSN: 0372-9311.

PUB. COUNTRY: USSR

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: Russian

FILE SEGMENT: Priority Journals

ENTRY MONTH: 198407

ENTRY DATE: Entered STN: 20 Mar 1990

Last Updated on STN: 20 Mar 1990

Entered Medline: 9 Jul 1984

ED Entered STN: 20 Mar 1990

Last Updated on STN: 20 Mar 1990 Entered Medline: 9 Jul 1984

AB The technology of the preparation of 20 diagnostic pneumococcal antisera premitting the differentiation of S. pneumoniae by K-antigen in the slide agglutination test and the capsule swelling test has been developed. The data on S. pneumoniae K-types isolated from patients have been obtained.

·L15 ANSWER 5 OF 15 MEDLINE on STN

ACCESSION NUMBER: 75148356 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 4156496

TITLE: Conversion of type III pneumococcal polysaccharide low

responders to high responders by immunization with a

thymus-dependent form of antigen.

AUTHOR: Braley-Mullen H; Sharp G C

SOURCE: Cellular immunology, (1974 Apr) Vol. 12, No. 1, pp.

49-60.

Journal code: 1246405. ISSN: 0008-8749.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 197508

ENTRY DATE: Entered STN: 10 Mar 1990

Last Updated on STN: 6 Feb 1995

Entered Medline: 4 Aug 1975

ED Entered STN: 10 Mar 1990

Last Updated on STN: 6 Feb 1995 Entered Medline: 4 Aug 1975

L15 ANSWER 6 OF 15 MEDLINE on STN

ACCESSION NUMBER: 73010969 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 4403777

TITLE: Hyperimmune response to a protein and a polypeptide

antigen coated on pneumococcus R36A.

AUTHOR: McDonald H C: Odstrchel G; Maurer P H

SOURCE: Journal of immunology (Baltimore, Md.: 1950), (1972)

Oct) Vol. 109, No. 4, pp. 881-3.

Journal code: 2985117R. ISSN: 0022-1767.

50-

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals

ENTRY MONTH: 197211

ENTRY DATE: Entered STN: 10 Mar 1990

Last Updated on STN: 6 Feb 1995 Entered Medline: 25 Nov 1972

ED Entered STN: 10 Mar 1990

Last Updated on STN: 6 Feb 1995 Entered Medline: 25 Nov 1972

L15 ANSWER 7 OF 15 MEDLINE on STN

ACCESSION NUMBER: 72186402 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 4402113

TITLE: Inflammatory lymphoid cells. Cells in immunized lymph

nodes that move to sites of inflammation.

AUTHOR: Asherson G L; Allwood G G

SOURCE: Immunology, (1972 Mar) Vol. 22, No. 3, pp. 493-502.

Journal code: 0374672. ISSN: 0019-2805.

PUB. COUNTRY: ENGLAND: United Kingdom

. DOCUMENT TYPE:

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE:

English

FILE SEGMENT:

Priority Journals

ENTRY MONTH:

197207

ENTRY DATE:

Entered STN: 10 Mar 1990

Last Updated on STN: 6 Feb 1995

Entered Medline: 25 Jul 1972

ED Entered STN: 10 Mar 1990

> Last Updated on STN: 6 Feb 1995 Entered Medline: 25 Jul 1972

L15 ANSWER 8 OF 15

MEDLINE on STN

ACCESSION NUMBER:

72106547 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 4400531

TITLE:

Competition of antigens during induction of low zone

tolerance.

AUTHOR:

Liacopoulos P; Couderc J; Gille M F

SOURCE:

European journal of immunology, (1971 Nov) Vol. 1, No.

5, pp. 359-63.

Journal code: 1273201. ISSN: 0014-2980. GERMANY, WEST: Germany, Federal Republic of

PUB. COUNTRY: DOCUMENT TYPE:

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE:

English

FILE SEGMENT:

Priority Journals

ENTRY MONTH:

197204

ENTRY DATE:

Entered STN: 10 Mar 1990

Last Updated on STN: 6 Feb 1995 Entered Medline: 19 Apr 1972

ED Entered STN: 10 Mar 1990

> Last Updated on STN: 6 Feb 1995 Entered Medline: 19 Apr 1972

L15 ANSWER 9 OF 15

MEDLINE on STN

ACCESSION NUMBER:

72051932 MEDLINE Full-text

DOCUMENT NUMBER:

PubMed ID: 4107956

TITLE:

[Cross-reacting microbial antigens and vaccine

prophylaxis (review)].

Perekrestno reagiruiushchie antigeny mikrobov i

vaktsinoprofilaktika (obzor.

AUTHOR:

Stanislavskii E S

SOURCE:

Zhurnal mikrobiologii, epidemiologii, i immunobiologii,

(1971 Oct) Vol. 48, No. 10, pp. 42-7. Ref: 61

Journal code: 0415217. ISSN: 0372-9311.

PUB. COUNTRY:

USSR

DOCUMENT TYPE:

Journal; Article; (JOURNAL ARTICLE)

General Review; (REVIEW)

LANGUAGE:

Russian

FILE SEGMENT:

Priority Journals

ENTRY MONTH:

197202

ENTRY DATE:

Entered STN: 10 Mar 1990

Last Updated on STN: 3 Feb 1997

Entered Medline: 2 Feb 1972

ED Entered STN: 10 Mar 1990

> Last Updated on STN: 3 Feb 1997 Entered Medline: 2 Feb 1972

L15 ANSWER 10 OF 15

MEDLINE on STN

ACCESSION NUMBER:

72029422

MEDLINE Full-text

DOCUMENT NUMBER:

PubMed ID: 4398890

TITLE:

Immunological paralysis of mice with pneumococcal

polysaccharide antigens.

AUTHOR:

Halliday W J

SOURCE:

Bacteriological reviews, (1971 Sep) Vol. 35, No. 3, pp.

267-89.

Journal code: 0370620. ISSN: 0005-3678.

PUB. COUNTRY:

United States

DOCUMENT TYPE:

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE:

English

FILE SEGMENT:

Priority Journals

ENTRY MONTH:

197201

ENTRY DATE:

Entered STN: 10 Mar 1990

Last Updated on STN: 6 Feb 1995

Entered Medline: 8 Jan 1972

ED Entered STN: 10 Mar 1990

> Last Updated on STN: 6 Feb 1995 Entered Medline: 8 Jan 1972

L15 ANSWER 11 OF 15

MEDLINE on STN

ACCESSION NUMBER:

71162711 MEDLINE Full-text

DOCUMENT NUMBER:

PubMed ID: 4396489

TITLE:

Characterization of the antibody response to type 3 pneumococcal polysaccharide at the cellular level. II. Studies on the relative rate of antibody synthesis and

release by antibody-producing cells.

AUTHOR: SOURCE: Baker P J; Stashak P W; Amsbaugh D F; Prescott B Immunology, (1971 Apr) Vol. 20, No. 4, pp. 481-92.

Journal code: 0374672. ISSN: 0019-2805.

PUB. COUNTRY:

ENGLAND: United Kingdom

DOCUMENT TYPE:

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE:

English

FILE SEGMENT:

Priority Journals

ENTRY MONTH:

197106

ENTRY DATE:

Entered STN: 1 Jan 1990

Last Updated on STN: 6 Feb 1995

Entered Medline: 7 Jun 1971

ED Entered STN: 1 Jan 1990

Last Updated on STN: 6 Feb 1995

Entered Medline: 7 Jun 1971

L15 ANSWER 12 OF 15

MEDLINE on STN

ACCESSION NUMBER: DOCUMENT NUMBER:

71162710 MEDLINE Full-text

PubMed ID: 4396488

TITLE:

Characterization of the antibody response to type 3 pneumococcal polysaccharide at the cellular level. I.

Dose-response studies and the effect of prior

immunization on the magnitude of the antibody response. Baker P J; Stashak P W; Amsbaugh D F; Prescott B

AUTHOR: SOURCE:

Immunology, (1971 Apr) Vol. 20, No. 4, pp. 469-80.

Journal code: 0374672. ISSN: 0019-2805.

PUB. COUNTRY:

ENGLAND: United Kingdom

DOCUMENT TYPE:

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE:

English

FILE SEGMENT:

Priority Journals

ENTRY MONTH:

197106

ENTRY DATE:

Entered STN: 1 Jan 1990

Last Updated on STN: 6 Feb 1995

Entered Medline: 7 Jun 1971

ED Entered STN: 1 Jan 1990

Last Updated on STN: 6 Feb 1995

Entered Medline: 7 Jun 1971

L15 ANSWER 13 OF 15 MEDLINE on STN

ACCESSION NUMBER: 70101258 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 4391650

TITLE: Antibodies of restricted heterogeneity for structural

study.

AUTHOR: Haber E

SOURCE: Federation proceedings, (1970 Jan-Feb) Vol. 29, No. 1,

pp. 66-71.

Journal code: 0372771. ISSN: 0014-9446.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 197003

ENTRY DATE: Entered STN: 1 Jan 1990

Last Updated on STN: 6 Feb 1995 Entered Medline: 14 Mar 1970

ED Entered STN: 1 Jan 1990

Last Updated on STN: 6 Feb 1995 Entered Medline: 14 Mar 1970

L15 ANSWER 14 OF 15 MEDLINE on STN

ACCESSION NUMBER: 69280457 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 4390062

TITLE: Idiotypy of rabbit antibodies. I. Comparison of

idiotypy of antibodies against Salmonella typhi with that of antibodies against other bacteria in the same rabbits, or of antibodies against Salmonella typhi in

various rabbits.
Oudin J; Michel M

SOURCE: The Journal of experimental medicine, (1969 Sep 1) Vol.

130, No. 3, pp. 595-617.

Journal code: 2985109R. ISSN: 0022-1007.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

AUTHOR:

FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals

ENTRY MONTH: 196910

ENTRY DATE: Entered STN: 1 Jan 1990

Last Updated on STN: 6 Feb 1995 Entered Medline: 21 Oct 1969

ED Entered STN: 1 Jan 1990

Last Updated on STN: 6 Feb 1995 Entered Medline: 21 Oct 1969

L15 ANSWER 15 OF 15 MEDLINE on STN

ACCESSION NUMBER: 68046071 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 4383410

TITLE: Secondary antibody responses in haptenic systems: cell

population selection by antigen.

AUTHOR: Paul W E; Siskind G W; Benacerraf B; Ovary Z

SOURCE: Journal of immunology (Baltimore, Md.: 1950), (1967

Oct) Vol. 99, No. 4, pp. 760-70.

Journal code: 2985117R. ISSN: 0022-1767.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals

ENTRY MONTH: 196801

. ENTRY DATE:

Entered STN: 1 Jan 1990

Last Updated on STN: 6 Feb 1995 Entered Medline: 14 Jan 1968

ED Entered STN: 1 Jan 1990

> Last Updated on STN: 6 Feb 1995 Entered Medline: 14 Jan 1968

(FILE 'HCAPLUS, MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO' ENTERED AT 14:55:23 ON 10 OCT 2006)

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L18
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L21
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L29 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 1

ACCESSION NUMBER:

2005:204321 HCAPLUS Full-text

DOCUMENT NUMBER:

142:480328

TITLE:

Antigenome technology: a novel approach for the selection of bacterial vaccine candidate antigens

AUTHOR(S):

Meinke, Andreas; Henics, Tamas; Hanner, Markus; Minh, Duc Bui; Nagy, Eszter

CORPORATE SOURCE:

Intercell AG, Vienna, A-1030, Austria Vaccine (2005), 23(17-18), 2035-2041

CODEN: VACCDE; ISSN: 0264-410X

PUBLISHER:

SOURCE:

Elsevier B.V.

DOCUMENT TYPE:

Journal

LANGUAGE:

English

11

A novel approach for the identification of protein antigens from bacterial pathogens was previously developed in our laboratory that combines the advantages of full genome coverage and serol. antigen identification. We have applied this technol. to several bacterial pathogens of the genera Staphylococcus and Streptococcus and have, as a result, defined the "antigenome" of these pathogens. This catalog defines the most relevant antigenic proteins that are targeted by the human immune system, including their antibody binding sites. The antigenome technol. offers an integrated approach for antigen validation in order to select the most promising candidates for the development of subunit vaccines against the targeted bacterial diseases. Using this technol., novel protective antigens were discovered from several important human pathogens.

REFERENCE COUNT:

THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 2

ACCESSION NUMBER:

2005:1030052 HCAPLUS Full-text

DOCUMENT NUMBER:

143:365290

TITLE:

Comparison of antibody repertoires against Staphylococcus aureus in healthy individuals and

in acutely infected patients

AUTHOR(S):

Dryla, Agnieszka; Prustomersky, Sonja; Gelbmann,

Dieter; Hanner, Markus; Bettinger,

Edith; Kocsis, Bela; Kustos, Tamas; Henics, Tamas;

Meinke, Andreas; Nagy, Eszter

Intercell AG, Vienna, Austria

SOURCE:

Clinical and Diagnostic Laboratory Immunology

(2005), 12(3), 387-398

CODEN: CDIMEN; ISSN: 1071-412X American Society for Microbiology

DOCUMENT TYPE: LANGUAGE:

PUBLISHER:

CORPORATE SOURCE:

Journal English

AΒ The management of staphylococcal diseases is increasingly difficult with present medical approaches. Preventive and therapeutic vaccination is considered to be a promising alternative; however, little is known about immune correlates of protection and disease susceptibility. To better understand the immune recognition of Staphylococcus aureus by the human host, the authors studied the antistaphylococcal humoral responses in healthy people in comparison to those of patients with invasive diseases. In a series of ELISA analyses performed using 19 recombinant staphylococcal cell surface and secreted proteins, the authors measured a wide range of antibody levels, finding a pronounced heterogeneity among individuals in both donor groups. The anal. revealed marked differences in the antibody repertoires of healthy individuals with or without S. aureus carriage, as well as in those of patients in the acute phase of infection. Most importantly, the authors identified antigenic proteins for which specific antibodies were missing or underrepresented in infected patients. In contrast to the well-described transient nature of disease-induced antistaphylococcal immune response, it was demonstrated that high-titer antistaphylococcal antibodies are stable for years in healthy individuals. In addition, the authors provide evidence obtained on the basis of opsonophagocytic and neutralizing activity in vitro assays that circulating antistaphylococcal serum antibodies in healthy donors are functional. In light of these data the authors suggest that proper serol. anal. comparing the preexisting antibody repertoires of hospitalized patients with different outcomes for nosocomial staphylococcal infections could be extremely useful for the evaluation of candidate vaccine antigens in addition to protection data generated with animal models.

REFERENCE COUNT:

THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

L29 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 3

ACCESSION NUMBER:

2004:1059380 HCAPLUS Full-text

DOCUMENT NUMBER:

142:36908

53

TITLE:

Enterococcus faecalis-derived hyperimmune serum reactive antigens, vaccines, nucleic acids and antibodies for diagnosis and treatment of

bacterial infection and for antagonist screening

INVENTOR(S):

Meinke, Andreas; Nagy, Eszter; Hanner, Markus; Gelbmann, Dieter

PATENT ASSIGNEE(S):

Intercell A.-G., Austria PCT Int. Appl., 175 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

SOURCE:

FAMILY ACC. NUM. COUNT:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| | | | | |
| WO 2004106367 | A2 | 20041209 | WO 2004-EP5664 | 20040526 |
| WO 2004106367 | A3 | 20050616 | | |

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             CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
             GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP,
             KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
            MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD,
             SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,
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    AU 2004242842
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    EP 1629005
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PRIORITY APPLN. INFO.:
                                            EP 2003-450137
                                                                 Α
                                                                    20030530
                                            WO 2004-EP5664
                                                                    20040526
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AB The present invention discloses isolated nucleic acid mols. encoding a hyperimmune serum reactive antigen or a fragment thereof as well as hyperimmune serum reactive antigens or fragments thereof from E. faecalis, methods for isolating such antigens and specific uses thereof. The antigens, nucleic acids encoding the antigens, vaccines, antibodies, antisense nucleic acids, siRNAs, anticalines, aptamers and spiegelmers are used for diagnosis and treatment of bacterial infection e.g. by Enterococcus, as well as for identifying antagonists.

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L29 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 4
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ACCESSION NUMBER:

2004:996211 . HCAPLUS Full-text

DOCUMENT NUMBER:

141:423303

TITLE:

Streptococcus agalactiae hyperimmune serum

reactive antigens, nucleic acids and antibodies for vaccines, antagonist screening and diagnosis

of bacterial infection

INVENTOR(S):

Meinke, Andreas; Nagy, Eszter;

Hanner, Markus; Horky, Markus; Kallenda,

Sabine; Prustomersky, Sonja

PATENT ASSIGNEE(S):

Intercell AG, Austria

SOURCE:

PCT Int. Appl., 221 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

VT: 1

| PATENT NO. | KIND DATE | APPLICATION NO. | DATE |
|----------------|-----------------|-----------------------|-------------|
| | | | |
| WO 2004099242 | A2 20041118 | WO 2004-EP4856 | 20040506 |
| WO 2004099242 | A3 20050616 | i | |
| W: AE, AG, AL, | AM, AT, AU, AZ, | BA, BB, BG, BR, BW, B | BY, BZ, CA, |
| CH, CN, CO, | CR, CU, CZ, DE, | DK, DM, DZ, EC, EE, E | EG, ES, FI, |
| GB, GD, GE, | GH, GM, HR, HU, | ID, IL, IN, IS, JP, F | KE, KG, KP, |
| KR, KZ, LC, | LK, LR, LS, LT, | LU, LV, MA, MD, MG, N | IK, MN, MW, |
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SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,
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             DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL,
             PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
             GW, ML, MR, NE, SN, TD, TG
     AU 2004235952
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                                20041118
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                                            CA 2004-2522986
                                                                    20040506
     EP 1620460
                          A2
                                20060201
                                            EP 2004-731346
                                                                    20040506
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     CN 1784419
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                          Α
                                                                    20040506
PRIORITY APPLN. INFO.:
                                            EP 2003-450112
                                                                 A 20030507
                                            EP 2003-450266
                                                                    20031128
                                            WO 2004-EP4856
                                                                    20040506
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AΒ The present invention discloses isolated nucleic acid mols. encoding a hyperimmune serum reactive antigen or a fragment thereof as well as hyperimmune serum reactive antigens or fragments thereof from S. agalactiae, methods for isolating such antigens. The hyperimmune serum reactive antigens are useful as vaccines against bacterial infection, especially infection by S. agalactiae; for raising antibodies (e.g. monoclonal antibodies, antibody fragments, chimeric and humanized antibodies); for screening antagonists; and for diagnosing bacterial infection. Also included in the invention are anticalines, aptamers and spiegelmers, and functional RNA comprising ribozymes, antisense nucleic acids and siRNA.

L29 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 5

ACCESSION NUMBER:

2004:905779 HCAPLUS Full-text

DOCUMENT NUMBER:

141:378840

TITLE:

Streptococcus pneumoniae

antigens, polynucleotides and antibodies

for antagonist screening and for diagnosis and

therapy of bacterial infection

INVENTOR(S):

Meinke, Andreas; Nagy, Eszter; Hanner, Markus; Dewasthaly,

Shailesh; Stierschneider, Ulrike

PATENT ASSIGNEE(S):

Intercell A.-G., Austria PCT Int. Appl., 191 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

| PATENT NO. KIND | | | | | | D - | DATE | | | APPL | ICAT | ION : | NO. | | D | ATE | | |
|-----------------|------------|----|--------------|-----|-----|----------|------|----------------|-----|------|------|-------|------|-----|-----|-----|--------|----|
| | | | 0922 0922 | | | A2 A3 | | 2004: 2004: | | 1 | WO 2 | 004- | EP39 | 84 | | 2 | 004041 | 15 |
| *** | <i>J</i> 2 | ₩: | AE, | AG, | | AM, | AT, | AU, | AZ, | | | | | | | | | |
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| | | | | | | | | LS, NZ, | | | | | | | | | | |
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VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
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             ML, MR, NE, SN, TD, TG
     AU 2004230244
                          A1
                                20041028
                                             AU 2004-230244
                                                                    20040415
     CA 2522238
                                             CA 2004-2522238
                          AA
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     EP 1615950
                          A2
                                20060118
                                             EP 2004-727537
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
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             PL, SK, HR
     CN 1774447
                                20060517
                                             CN 2004-80010200
                                                                    20040415
PRIORITY APPLN. INFO.:
                                             EP 2003-450087
                                                                    20030415
                                             WO 2004-EP3984
                                                                    20040415
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AB The present invention discloses isolated nucleic acid mols. encoding a hyperimmune serum reactive antigen or a fragment thereof as well as hyperimmune serum reactive antigens or fragments thereof from S. pneumoniae, methods for isolating such antigens and specific uses thereof. The invention also provides monoclonal antibodies, Fab fragments, chimeric antibodies and humanized antibodies specific to the Streptococcus pneumoniae antigens. In addition, the invention disclosed methods for antagonist screening; bacterial infection diagnosis and therapy; selection of anticalines, aptamers and spiegelmers; and manufacture of functional RNA, ribozymes, antisense nucleic acids and siRNA.

L29 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 6

ACCESSION NUMBER:

2003:547350 HCAPLUS Full-text

DOCUMENT NUMBER:

139:95970

TITLE:

Small-fragment genomic libraries for the display of putative epitopes from clinically significant

pathogens

AUTHOR(S):

Henics, T.; Winkler, B.; Pfeifer, U.; Gill, S. R.;

Buschle, M.; von Gabain, A.; Meinke, A. L.

CORPORATE SOURCE:

Intercell AG, Vienna, Austria

SOURCE:

BioTechniques (2003), 35(1), 196-

200,202,204,206,208-210

CODEN: BTNQDO; ISSN: 0736-6205

PUBLISHER:

Eaton Publishing Co.

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB Taking advantage of whole genome sequences of bacterial pathogens in many thriving diseases with global impact, a comprehensive screening procedure was developed for the identification of putative vaccine candidate antigens. Importantly, this procedure relies on highly representative small-fragment genomic libraries that are expressed to display frame-selected epitope-size peptides on a bacterial cell surface and to interact directly with carefully selected disease-relevant high-titer sera. The generation of small-fragment genomic libraries of Gram-pos. and Gram-neg. clin. significant pathogens is described, including Staphylococcus aureus and Staphylococcus epidermidis, Streptococcus pyogenes, Streptococcus agalactiae, and Streptococcus pneumoniae, Enterococcus faecalis, Helicobacter pylori, Chlamydia pneumoniae, the enterotoxigenic Escherichia coli, and Campylobacter jejuni. Large-scale sequencing revealed that the libraries, which provide an average of 20-fold coverage, were random and, as demonstrated with two S. aureus libraries, highly representative. Consistent with the comprehensive nature of this approach is the identification of epitopes that reside in both annotated and

putatively novel open reading frames. The use of these libraries therefore allows for the rapid and direct identification of immunogenic epitopes with no apparent bias or difficulty that often associate with conventional expression methods.

L29 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2002:575103 HCAPLUS Full-text

DOCUMENT NUMBER:

137:168250

TITLE:

Hyperimmune **serum**-reactive

antigens derived from expression libraries
for treating or preventing pathogen infection,

cancer, allergy, and autoimmune disease

INVENTOR(S):

Meinke, Andreas; Nagy, Eszter;

Von Ahsen, Uwe; Klade, Christoph; Henics, Tamas; Zauner, Wolfgang; Minh, Duc Bui; Vytvytska, Oresta; Etz, Hildegard; Dryla, Agnieszka;

Weichhart, Thomas; Hafner, Martin; Tempelmaier,

Brigitte

PATENT ASSIGNEE(S): SOURCE:

Cistem Biotechnologies Gmbh, Austria; Intercell AG

PCT Int. Appl., 252 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

| PA | PENT | NO. | | | KIN | | DATE | | APPLICATION NO. DATE | | | | | | | | |
|------|--------------|-----|--------------|------|-----------|------------|--------------|--------------|----------------------|-------|-------------|----------------------|----------|------|-----|------------------|-------------|
| | 2002 2002 | | 48 | | A2 | | | | WO 2002-EP546 | | | | | | 2 | 002012 | 21 |
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| ΔТ | 2001 | | 011 , | GA, | ΔN, | GΩ, | 2002 | 1015 | MR, | | | | | | 2 | 001016 | |
| | 4107 | | ٠. | | E V | | 2002 2003 | 1213 0725 | • | AI Z | 001- | 130 | | | 2 | 001012 | 26 |
| | 2436 | | | | עע | | 2003 | 0723 | | C 7 2 | 002- | 2126 | 057 | | 2 | 000010 | ١1 |
| | 1355 | | | | | | | | | | | | | | | 002012 002012 | _ |
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| BB | 2002 | | | | | | 2004 | | | | | | | | | 002012 | . 1 |
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| CN | 1649 | 894 | , 0 | | Δ | | 2005 | 0803 | Ì | CM 2 | 002- | 2054. 2057 | 50 65 | | 2 | 002012 | .⊥ o1 |
| AΤ | 3092 | 68 | | | E | | 2005 | 1115 | | ለጥ ጋ/ | 002- | 7166 | 60 | | . 2 | 002012 | 1 1 1 1 |
| | 1616 | 876 | | | Δ2 | | 2005 | 0118 | 1 | FD 2 | 002 005- | 100 | 22 | | 2 | 002012 | |
| EP | 1616 | 876 | | | Δ3 | | 2006 | | | DL ZV | 005 | 1004. | 22 | | 2 | 002012 | . 1 |
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| PT, IE, SI, | LT, | LV, FI, RO, | MK, CY, AL, TR | | |
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| ES 2252438 | Т3 | 20060516 | ES 2002-2716669 | | 20020121 |
| NO 2003003364 | Α | 20030924 | NO 2003-3364 | | 20030725 |
| ZA 2003005764 | Α | 20040726 | ZA 2003-5764 | | 20030725 |
| US 2005037444 | A1 | 20050217 | US 2004-470048 | | 20040206 |
| PRIORITY APPLN. INFO.: | | | AT 2001-130 | A | 20010126 |
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| · | | | EP 2002-716669 | Α | 20020121 |
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| | | | WO 2002-EP546 | W | 20020121 |
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AB Described is a method for identification, isolation and production of hyperimmune serum-reactive antigens from a specific pathogen, a tumor, an allergen or a tissue or host prone to autoimmunity that are suited for use as vaccines for treating related diseases in animals or humans. The method is characterized by providing an antibody preparation from a plasma pool of said given type of animal or from a human plasma pool or individual sera with antibodies against said specific pathogen, tumor, allergen or tissue or host prone to auto-immunity; providing at least one expression library of said specific pathogen, tumor, allergen or tissue or host prone to auto-immunity; screening said at least one expression library with said antibody preparation; identifying antigens which bind in said screening to antibodies in said antibody preparation; screening the identified antigens with individual antibody prepns. from individual sera from individuals with antibodies against . said specific pathogen, tumor, allergen or tissue or host prone to autoimmunity; identifying the hyperimmune serum-reactive antigen portion of said identified antigens and which hyperimmune serum-reactive antigens bind to a relevant portion of said individual antibody prepns. from said individual sera; and optionally isolating said hyperimmune serum-reactive antigens and producing said hyperimmune serum-reactive antigens by chemical or recombinant methods.

FILE 'HOME' ENTERED AT 14:58:39 ON 10 OCT 2006

(FILE 'HOME' ENTERED AT 12:47:15 ON 10 OCT 2006) SET COST OFF

| L1 | FILE 'REGISTRY' ENTERED AT 12:47:24 ON 10 OCT 2006 2 SEA ABB=ON PLU=ON ALUM/CN |
|--|--|
| L2 | FILE 'HCAPLUS' ENTERED AT 12:47:29 ON 10 OCT 2006 5865 SEA ABB=ON PLU=ON (POLYCATION? OR POLY CATION?)(S)(POLYME R## OR PEPTIDE OR POLYPEPTIDE OR PROTEIN OR POLYPROTEIN) OR ODN OR (IMMUNOSTIMUL? OR IMMUN? STIMUL?)(3A)(DEOXYNUCLEO TIDE OR DEOXY NUCLEOTIDE) OR (KLK OR LYS LEU LYS)(5A)MOTIF OR (NEUROACTIV? OR NEURO ACTIV?)(3A)(COMPOUND OR COMP##) |
| L3 | 54120 SEA ABB=ON PLU=ON L1 OR ALUM OR FREUND? OR (COMPLET? OR INCOMPLET?) (3A) ADJUVANT |
| L4 | 2104 SEA ABB=ON PLU=ON (SP2216 OR (SP OR PNEUMON?)(3A)2216 OR (STREPTOCOCC? OR DIPLOCOCC? OR D OR S)(W)PNEUMONIAE OR PNEUMOCOCC?) AND ANTIGEN## |
| L5 L6 | 585 SEA ABB=ON PLU=ON L4 AND (SERUM OR SERA) 14 SEA ABB=ON PLU=ON (L2 OR L3) AND L5 D QUE L6 D L6 1-14 .BEVSTR |
| L7 L8 | FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO' ENTERED AT 14:50:37 ON 10 OCT 2006 39 SEA ABB=ON PLU=ON L6 28 DUP REM L7 (11 DUPLICATES REMOVED) D 1-28 IBIB ABS |
| L9 | FILE 'HCAPLUS' ENTERED AT 14:53:02 ON 10 OCT 2006 1123 SEA ABB=ON PLU=ON (STREPTOCOCCUS PNEUMONIAE AND VACCINES) /CT |
| L11 | 325 SEA ABB=ON PLU=ON L9 AND ANTIGENS/CT 11 SEA ABB=ON PLU=ON L10 AND (ANTISERUMS OR BLOOD SERUM)/CT 9 SEA ABB=ON PLU=ON L11 NOT L6 D 1-9 .BEVSTR |
| L13 | FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO' ENTERED AT 14:54:16 ON 10 OCT 2006 0 SEA ABB=ON PLU=ON L11 |
| L14 L15 | FILE 'MEDLINE' ENTERED AT 14:54:30 ON 10 OCT 2006 862 SEA ABB=ON PLU=ON (STREPTOCOCCUS PNEUMONIAE AND (VACCINES OR VACCINATION OR IMMUNIZATION))/CT 15 SEA ABB=ON PLU=ON L14 AND ANTIGENS/CT D QUE D 1-15 .BEVERLYMED |
| L16 L17 L18 L19 L20 L21 L22 L23 | FILE 'HCAPLUS, MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO' ENTERED AT 14:55:23 ON 10 OCT 2006 227 SEA ABB=ON PLU=ON "MEINKE A"?/AU 3762 SEA ABB=ON PLU=ON "NAGY E"?/AU 370 SEA ABB=ON PLU=ON "HANNER M"?/AU 8 SEA ABB=ON PLU=ON "DEWASTHALY S"?/AU 2 SEA ABB=ON PLU=ON "STIERSCHNEIDER U"?/AU 2 SEA ABB=ON PLU=ON L16 AND L17 AND L18 AND L19 AND L20 50 SEA ABB=ON PLU=ON L16 AND (L17 OR L18 OR L19 OR L20) 16 SEA ABB=ON PLU=ON L17 AND (L18 OR L19 OR L20) |

| L24 L25 | | B=ON PLU=ON B=ON PLU=ON | L18 AND (L19 OR L20) L19 AND L20 | |
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| L26 | 4299 SEA AB | B=ON PLU=ON | L22 OR L16 OR L17 OR | L18 OR L19 OR L20 |
| L27 | 7 SEA AB | B=ON PLU=ON | L26 AND (L5 OR L10) | |
| L28 | 21 SEA AB | B=ON PLU=ON | L21 OR L23 OR L24 OR | L25 OR L27 |
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FILE HOME

FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 9 OCT 2006 HIGHEST RN 910025-51-3 DICTIONARY FILE UPDATES: 9 OCT 2006 HIGHEST RN 910025-51-3

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http://www.cas.org/ONLINE/UG/regprops.html

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FILE COVERS 1907 - 10 Oct 2006 VOL 145 ISS 16 FILE LAST UPDATED: 8 Oct 2006 (20061008/ED)

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FILE LAST UPDATED: 7 Oct 2006 (20061007/UP). FILE COVERS 1950 TO DAT

On December 11, 2005, the 2006 MeSH terms were loaded.

The MEDLINE reload for 2006 is now (26 Feb.) available. For details on the 2006 reload, enter HELP RLOAD at an arrow prompt (=>). See also:

http://www.nlm.nih.gov/mesh/

http://www.nlm.nih.gov/pubs/techbull/nd04/nd04 mesh.html

http://www.nlm.nih.gov/pubs/techbull/nd05/nd05 med data changes.ht

http://www.nlm.nih.gov/pubs/techbull/nd05/nd05 2006 MeSH.html

OLDMEDLINE is covered back to 1950.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2006 vocabulary.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE BIOSIS

FILE COVERS 1969 TO DATE.

CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 4 October 2006 (20061004/ED)

FILE EMBASE

FILE COVERS 1974 TO 10 Oct 2006 (20061010/ED)

EMBASE has been reloaded. Enter HELP RLOAD for details.

EMBASE is now updated daily. SDI frequency remains weekly (default) and biweekly.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE WPIDS

FILE LAST UPDATED: 5 OCT 2006 <20061005/UP>
MOST RECENT DERWENT UPDATE: 200664 <200664/DW>

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>>> PLEASE BE AWARE OF THE NEW IPC REFORM IN 2006, SEE http://scientific.thomson.com/media/scpdf/ipcrdwpi.pdf <<

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http://www.stn-international.de/stndatabases/details/dwpi r.html <<<

FILE CONFSCI

FILE COVERS 1973 TO 29 Aug 2006 (20060829/ED)

CSA has resumed updates, see NEWS FILE

FILE SCISEARCH

FILE COVERS 1974 TO 5 Oct 2006 (20061005/ED)

SCISEARCH has been reloaded, see HELP RLOAD for details.

FILE JICST-EPLUS FILE COVERS 1985 TO 10 OCT 2006 (20061010/ED)

THE JICST-EPLUS FILE HAS BEEN RELOADED TO REFLECT THE 1999 CONTROLLED TERM (/CT) THESAURUS RELOAD.

FILE JAPIO
FILE LAST UPDATED: 3 APR 2006 <20060403/UP>
FILE COVERS APRIL 1973 TO DECEMBER 22, 2005

>>> GRAPHIC IMAGES AVAILABLE <<<

>>> NEW IPC8 DATA AND FUNCTIONALITY NOT YET AVAILABLE IN THIS FILE.

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DEVELOPMENTS AND SEE OUR NEWS SECTION FOR FURTHER INFORMATION

ABOUT THE IPC REFORM <<<